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STATE OF ALASKA  
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RED KING CRAB, Paralithodes camtschatica, EXPLORATIONS AROUND THE  
KODIAK ARCHIPELAGO: THE HISTORY AND RESULTS 1971-1985

By:

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October 1986

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Don W. Collinsworth  
Commissioner

## ADF&G TECHNICAL DATA REPORTS

This series of reports is designed to facilitate prompt reporting of data from studies conducted by the Alaska Department of Fish and Game, especially studies which may be of direct and immediate interest to scientists of other agencies.

The primary purpose of these reports is presentation of data. Description of programs and data collection methods is included only to the extent required for interpretation of the data. Analysis is generally limited to that necessary for clarification of data collection methods and interpretation of the basic data. No attempt is made in these reports to present analysis of the data relative to its ultimate or intended use.

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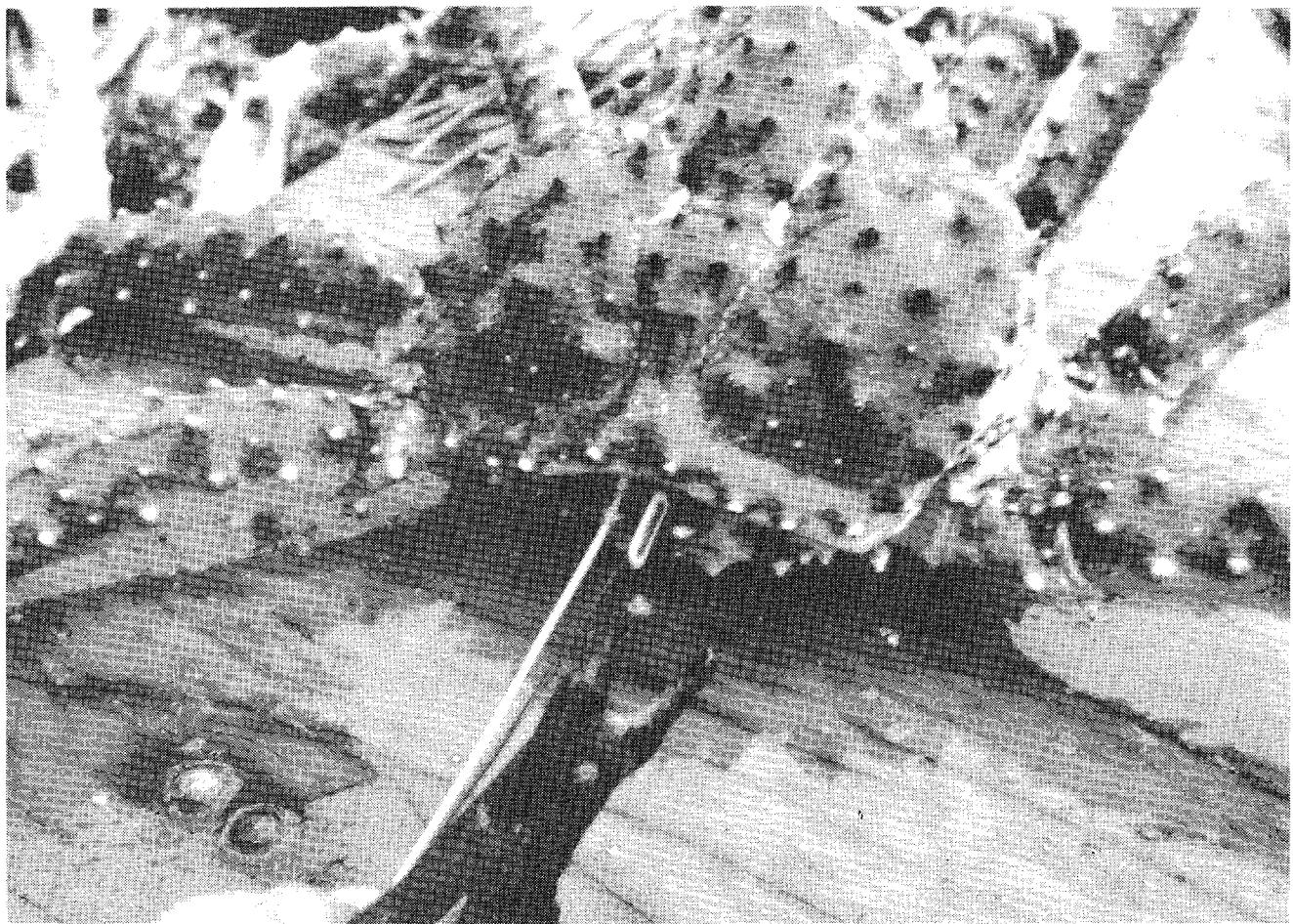
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## DEFINITION OF TERMS

- Carapace Length - The straight line distance across the carapace from the posterior margin of the right eye orbit to the medial-posterior margin of the carapace.
- Legal Size - Male king crab seven inches (178 mm) or greater in shell width, including the spines, measured as the straight line distance across the carapace at a right angle to a line midway between the eyes to the midpoint of the posterior portion of the carapace.
- Juvenile Females - 1971-1979: nonovigerous females with carapace lengths of less than 120 mm. 1980-1985: nonovigerous females with carapace lengths of less than 116 mm.
- Adult Females - 1971-1979: all ovigerous females and all nonovigerous females greater than or equal to 120 mm. 1980-1985: ovigerous and nonovigerous females with carapace lengths greater than 115 mm.
- Newshell Males - Individuals that molted during the last molting season (generally January through April).
- Oldshell Males - (skipmolts) - Individuals that failed to molt during the last molting season.
- Very Oldshell Males - (double skipmolts) - Individuals that failed to molt during the last two or more molting seasons.
- Prerecruit Fours - (4's) - Individuals estimated to be 4 or more years from legal size and from 1971-1979 were less than or equal to 90 mm and from 1980-1985 were less than 95 mm.
- Prerecruit Threes - (3's) - Individuals estimated to be three years from legal size and from 1971-1979 were 91-108 mm and from 1980-1985 were 95-112 mm.
- Prerecruit Twos - (2's) - Individuals estimated to be two years from legal size and from 1971-1979 were 109-126 mm and from 1980-1985 were 113-130 mm.
- Prerecruit Ones - (1's) - Individuals estimated to be one year from legal size and from 1971-1979 were 127-144 mm and from 1980-1985 were sublegals greater than 130 mm.

- Recruits
- Newshell males which are legal size and are in their first year of availability to the commercial fishery. Because width measurements were not recorded from 1971-1979, recruits were assumed to be all newshell males 145-163 mm carapace length. From 1980-1985 they were legal crabs less than or equal to 164 mm carapace length. Starting in 1980 all crabs were classified as legal or sublegal by taking a width measurement.
- Postrecruits
- Males which are legal size or estimated to be so and are not classified as recruits. In 1971-1979 they were newshells greater than or equal to 164 mm in carapace length and all oldshells and very oldshells greater than 145 mm carapace length. For 1980-85 they were all legal size old shells and very oldshells and all newshells greater than 164 mm in carapace length.

## ABSTRACT

The Alaska Department of Fish and Game conducted annual red king crab, *Paralithodes camtschatica*, surveys around the Kodiak Archipelago from 1971-1985. The primary objective was to monitor abundance and reproductive condition of the red king crab stocks.

This report documents where, when, and how these annual surveys were conducted and summarizes research catch statistics for 820,618 king crab captured in 27,358 pot lifts.

KEY WORDS: king crab, surveys, Kodiak Archipelago, abundance estimates, research station, soak-time, sampling procedure.

## INTRODUCTION

During the 1950's and 1960's existing research agencies in the state of Alaska studied the biology, life history, and environment of the king crab, *Paralithodes camtschatica*, throughout the Kodiak Archipelago. The research agency conducting surveys in the early 1950's was the Bureau of Commercial Fisheries. After statehood the Alaska Department of Fish and Game assumed the responsibilities of the Bureau. The data gathered in the following decades focused on specific aspects of crab life history, i.e. growth per molt, migration, size at maturity, and commercial catch statistics. While this type of information proved valuable to the study of individual aspects of crab biology, it was not sufficient by itself to develop a comprehensive management strategy. Therefore, in 1971 a new long-term yearly assessment program involving the entire Kodiak Archipelago was adopted.

The goal of the survey was to monitor the abundance and reproductive condition of king crab stocks. Throughout the study specific objectives evolved. These objectives include 1) assessment of the relative abundance of the various age classes of king and Tanner crab, *Chionoecetes bairdi*; 2) observation of female ovigerity; 3) assessment of the effects of the commercial fishery upon the crab stocks; 4) evaluation of the effects of no commercial fishing upon the crab stocks; 5) acquisition of records and measurements of incidentally captured marine species, e.g. Pacific cod, *Gadus macrocephalus*, Pacific halibut, *Hippoglossus stenolepis*; 6) examination of techniques which could predict the population of prerecruit male crab one to four years prior to their legal entry into the commercial fishery; and 7) collection of tissue and egg clutch samples from female crabs for disease and egg predator analyses, respectively. Objectives of new and special studies done in 1984 were directed toward the following areas: 1) examination of female egg clutch and reproductive condition at a stage early in the egg bearing cycle so as to determine possible causes of reproductive declines, 2) observation of the effect of various soak time limits on standardized catches, and 3) investigation of the variability of the population numbers generated based on the location and orientation of stations.

The Alaska Department of Fish and Game (ADF&G) has continued this more complete program of study annually through 1985. This report documents where, when, and how the research pot surveys were conducted between 1971 and 1985 on Kodiak king crab stocks and also presents research catch statistics by fishing station and by year. Results of the 1971 survey are presented in table summaries only. A detailed presentation is available in Powell 1974.

## METHODS AND PROCEDURES

The study area consists of the ocean area surrounding the Kodiak Archipelago (Figure 1). This area contains over 43,200 sq km (27,000 sq mi) of continental shelf with water depths of less than 457 meters (250 fms). The initial objectives of this research program required that the sampling stations be located in a systematic manner and that the same stations be fished each year. A complete discussion of initial survey designs and results

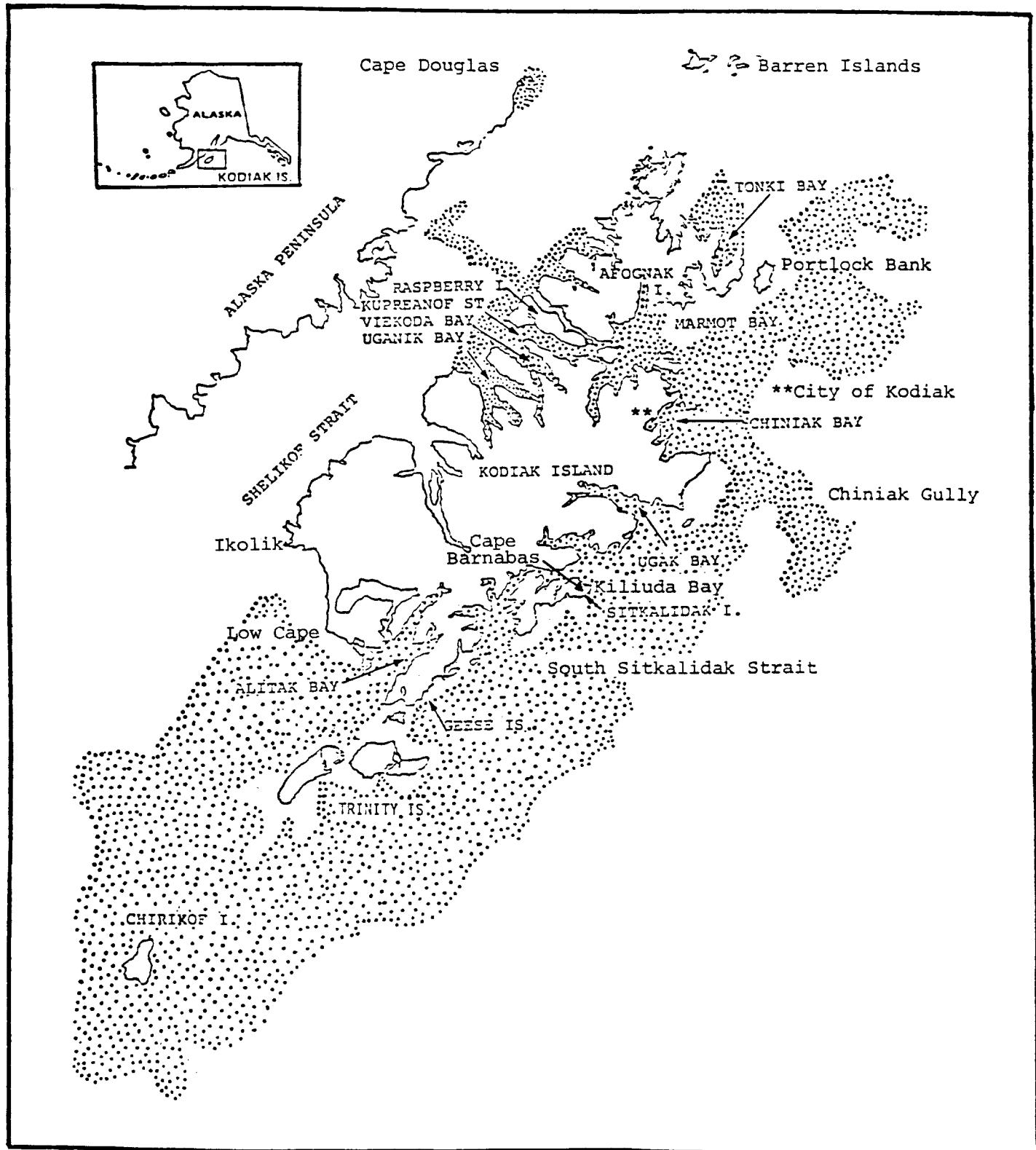


Figure 1. Locations of research surveys for Kodiak Island area (stippling shows survey areas).

for the time period 1970-1972 is presented in Kingsbury et al. (1974) and is not duplicated in this report. A new station pattern consisting of stations arranged in a staggered checkerboard was developed in 1973 (Figure 2). Exact positions of stations were determined by randomly placing the station grid described on the fishing ground chart with the stations running in an east-west direction. Stations which could not be fished due to strong tides, surf conditions, or depths were eliminated. This method was employed until it was determined the station design was inadequate for the sampling of Kupreanof Strait, Viekoda Bay, and Uganik Bay areas in 1981. For this reason some of the stations were rearranged to provide for a more representative study. Station number changes during the fifteen year survey period are documented in Appendix A. Refer to individual year figures for specific station orientation.

The number of stations fished each year has depended upon the number of vessel days available, the speed and efficiency with which an individual vessel could fish, and the number of crab captured. The survey effort has varied greatly in three instances: in 1978 when only South End ocean stations were fished, in 1984 when a number of special projects were conducted, and in 1985 when the North End of Kodiak Island received only minimal survey effort.

In 1984 several resurvey investigations were conducted at standard and non-standard research stations. Standard research stations conform to the pattern established in 1973 as is shown in Figure 2. Non-standard stations are plotted as variations of the standard station basic pattern. The procedures followed in this year differed from the standard research procedures of the other years. Several of these resurvey investigations were initiated solely by the Department, while others were jointly decided upon by the Department and interested fishermen groups. The former involved three resurveys, and the latter included two special studies with the F/V ARCTIC LADY and the F/V ALASKA TROJAN.

The F/V ARCTIC LADY survey allowed ADF&G to examine the repeatability and precision on ADF&G standard surveys in providing population estimates; the study was done in the Ikolik-Low Cape and Chiniak Gully areas. The approach taken was to fish a predetermined pattern of interspaces between the standard ADF&G east-west stations. The F/V ALASKA TROJAN survey, fishing Kupreanof Strait and Uganik and Viekoda Bays, focused on female egg clutch condition as described above.

Of the three resurveys conducted by the Department, the first involved the fishing of regular stations in Chiniak Bay during June and again in August to obtain seasonal change data. The second resurvey, in the Chirikof area, included fishing the regular stations and their interspaces. The third resurvey entailed the fishing of the standard pot survey stations in the Ugak-Barnabas area and then performance of a trawl survey in this same area (Blackburn and Donaldson 1985). In addition, an experiment was conducted to determine the effects of soak-time on the catch of crabs. These studies were conducted in Chiniak Gully and in the vicinity of Cape Ikolik (Johnson 1985).

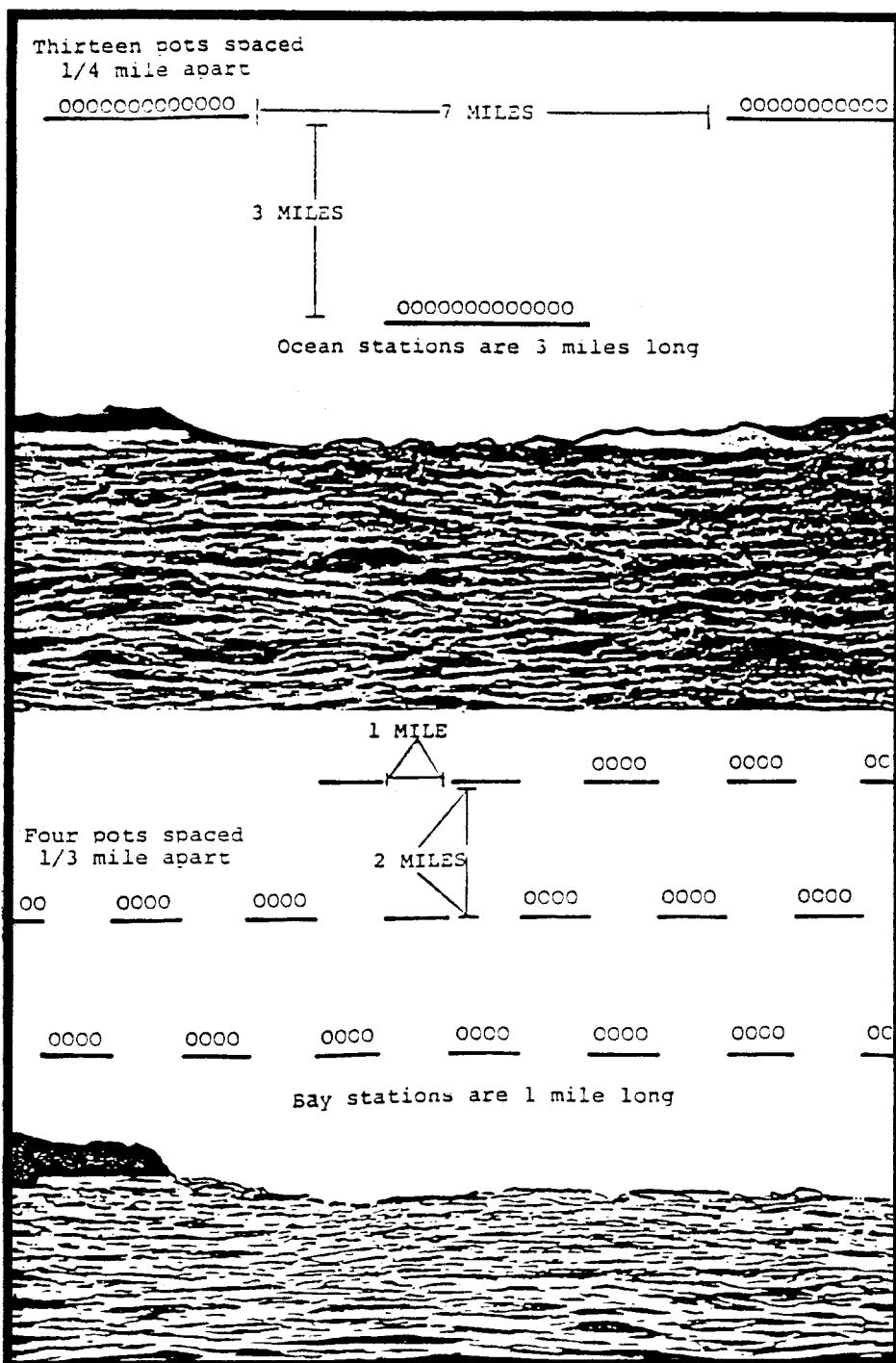


Figure 2. Research station design and systematic placement for Kodiak crab surveys (1973-1985).

### Gear Specifications

Commercial size pots measuring 203 cm x 203 cm x 76 cm (7 ft x 7 ft x 30 in), weighing 273-318 kg (600-700 lbs) and with eye openings of 20 cm x 9 cm (51 in x 23 in) were used. Each pot was covered with nylon thread with 9 cm (3-1/2 in) stretch mesh as compared to the 24 cm stretch mesh normally used in the commercial fishery. The smaller mesh size enabled the retention of smaller crabs. Pots were baited with chopped frozen herring contained in two 0.95 liter (1 qt) perforated bait jars. No hanging bait was used. The pots were pulled daily, except when weather, vessel breakdowns, or break periods prolonged fishing times.

### Vessels

Surveys were conducted utilizing chartered fishing vessels and the Department's research vessel, R/V RESOLUTION (Table 1).

### Fishing Procedures

Baited pots were set at designated locations and allowed to soak for an average of 18-20 hours. Individual pot identifications, environmental conditions, depths, and elapsed fishing times were recorded for each pot (Appendix B). Each fishing day pots were retrieved, rebaited, and set at new stations until the survey was completed.

### On-board Sampling

The sampling procedures for handling the catch in a particular pot were reasonably consistent between years, although the specific procedures depended on the chartered vessel, the number of people in the biological crew, the quantity and composition of each pot's catch, the experience of the crew leader, and other related factors. Particular emphasis, however, was placed on identifying the collected data with the correct pot. As the pots were set, the times, locations, buoy numbers, and pot orders were recorded on the "Pilot House Skippers Form" (Appendix B1 and B2). When pots were picked the times were recorded on this same form and procedures were followed to make sure all required measurement forms had the correct station and buoy number. In addition to the skippers form, an incidental species form was completed for each pot. Measurement forms for king and Tanner crab were filled out for every pot from 1971-1982 but only when crabs were captured from 1983-1985. A diagram defining crab measurement specifications is shown in Figure 3. At present the incidental species form requires a recording of "0" for each species and/or sex combination not captured in a pot and a "check" if the combination was present. Table 2 presents a historical overview of the data collected each survey year.

### Specific King Crab and Tanner Crab Procedures

The sampling procedure for each pot varied somewhat depending on the quantity and composition of the individual pot catches. The intent was to enumerate all crab by species, sex, size, and shell age. A representative sample of each of these categories was measured and recorded on the appropriate measurement form. The present survey operational plan calls for a minimum

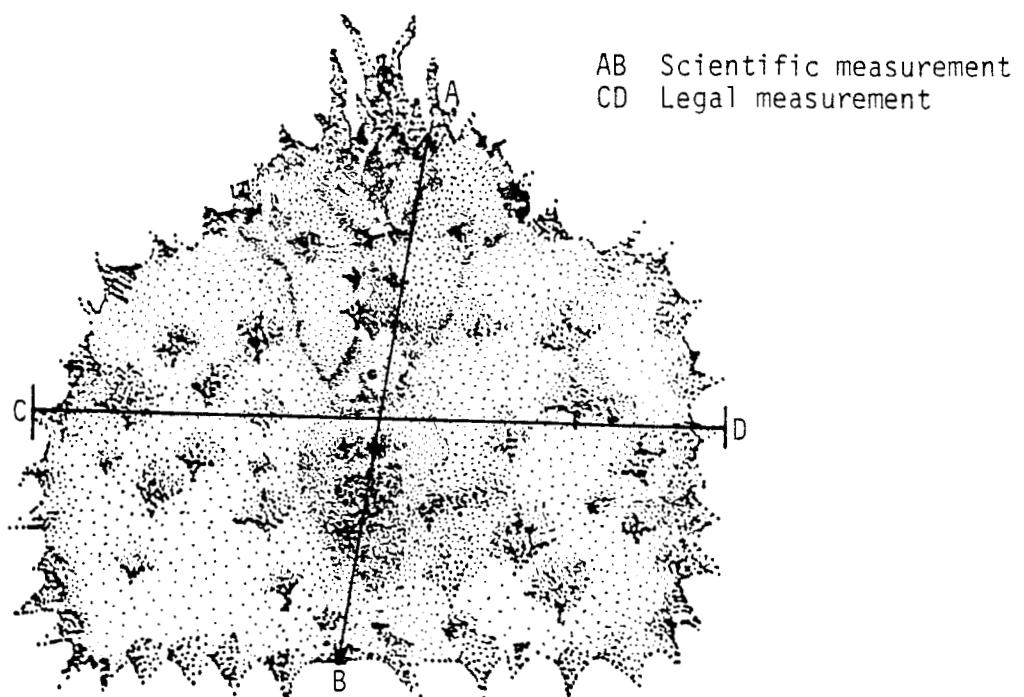
Table 1. Kodiak king crab, *Paralithodes camtschatica*, charter statistics 1971-1985.

DATE	VESSEL(S)	VESSEL CODE	KEEL LENGTH (Ft.)	SCIENTIFIC CREW LEADERS	NO. STATIONS FISHED		TOTAL POT LIFTS	NO. MALE KING CRAB CAPTURED		NO. FEMALE KING CRAB CAPTURED		RATIO <sup>2/</sup>
					OCEAN	BAY		ACTUAL	STANDARDIZED <sup>1/</sup>	ACTUAL	STANDARDIZED	
1971 7/8-8/6	PACIFIC LADY	1	71	Guy Powell	99	2	50	14,119	13,054	6,947	5,418	2.4
1972 6/23-8/2	PEGGY JO MARTEN	1 2	88 85	Guy Powell Nate Johnson	58 38	78 39	2,391	27,815	36,311	26,014	30,843	1.2
1973 6/25-8/5	RESOLUTION ROSEMARY ROSIE G	4 6 5	81 87 81	Rod Kaiser Rod Kaiser Guy Powell	51 9 80	8 40 48	1,990	45,086	50,643	33,339	38,622	1.3
1974 6/28-7/27	VIRGINIA SANTOS ROSEMARY	1 2	167 87	Guy Powell Rod Kaiser	67 69	31 70	2,017	69,915	90,851	43,529	53,751	1.7
1975 6/23-8/1	ADVENTURE ELIZABETH F THERESA MARIE	3 2 4	81 81 78	Bill Donaldson Guy Powell Tom Hayden	67 56 9	10 43 0	1,895	40,633	50,699	15,275	18,834	2.7
1976 6/3-8/1	KATIE K PACIFIC MARINER RESOLUTION	3 4 1	92 91 81	Guy Powell Tom Hayden Bill Nippes	82 10 73	39 0 42	1,946	37,862	45,996	29,018	34,699	1.3
1977 6/26-8/16	ALYESKA RESOLUTION ROSIE G	3 1 2	110 81 81	Ken Griffin Dan Konigsberg Guy Powell	18 57 51	0 55 50	1,646	66,800	83,389	63,755	77,084	1.1
1978 6/26-7/25	KATIE K	2	92	Dan Konigsberg	75	0	895	26,901	32,996	22,156	26,734	1.2
1979 6/19-9/6	NUNIVAK RESOLUTION	2 1	82 81	Bill Donaldson Rod Kaiser/ Dan Konigsberg/Irving Warner	47 97	85 59	1,709	36,704	43,794	29,662	37,779	1.2
1980 7/1-8/16	ANTARES ISAFJORD	4 5	110 165	Ken Carrasco David Hicks/ Bill Colgate	81 82	68 50	2,339	38,816	50,602	41,760	54,205	0.9
1981 7/7-8/13	NUNIVAK SHISHALDIN	3 4	82 100	Ken Carrasco Forrest Blau	39 89	82 32	1,793	22,947	29,833	26,815	34,475	0.9
1982 7/9-8/28	DETERMINED	3	91	Forrest Blau	143	102	1,721	5,755	7,283	9,202	11,894	0.6
1983 7/18-9/6	AMBER DAWN	2	97	Forrest Blau	163	167	2,091	4,992	5,877	12,262	14,756	0.4
1984 6/20-8/15	ALEUTIAN NO. 1	3	119	Forrest Blau/ Bill Nippes/ Guy Powell	175	126						
	ALASKA TROJAN ARCTIC LADY	2 4	90 100	Forrest Blau Bill Nippes/ Al Spalinger	0 68	84 1	3,117	6,672	8,001	10,875	13,487	0.6
1985 7/17-8/21	ALEUTIAN NO. 1	2	119	Bill Nippes	101	79	1,304	1,672	2,041	3,320	4,295	0.5
<b>TOTALS</b>							27,357	446,689	551,374	373,929	456,876	1.2

<sup>1</sup> Catch per pot adjusted to a 24 hour soak period. See Table 3.

<sup>2</sup> Ratios are based on standardized numbers.

Red king crab, *Paralithodes camtschatica*



Tanner crab, *Chionoecetes bairdi*

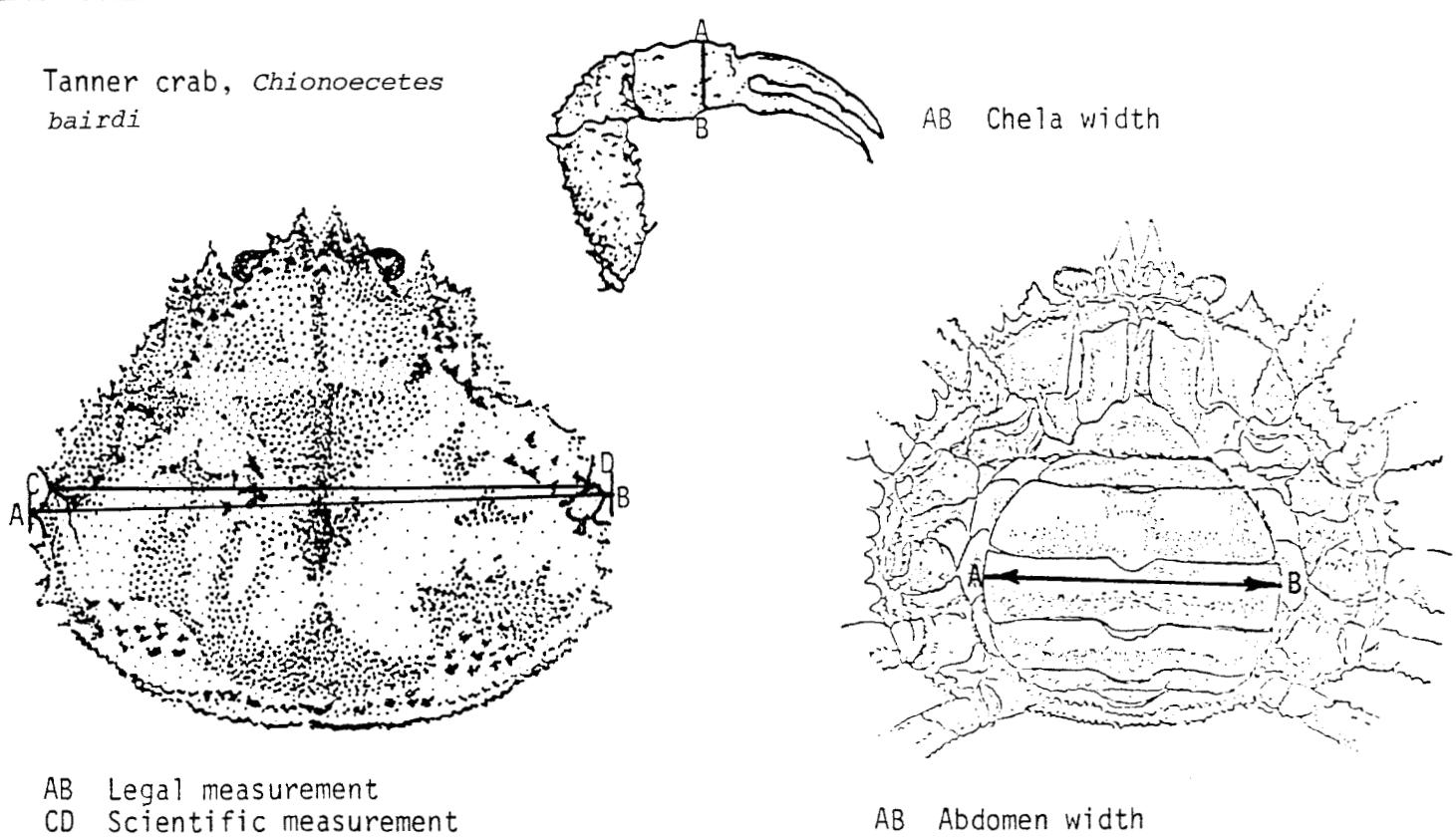


Figure 3. Scientific and legal measurements taken for king crab, *Paralithodes camtschatica*, and Tanner crab, *Chionoecetes bairdi*.

Table 2. Existing select historical red king crab, *Paralithodes camtschatica*, survey data (1971-1985) for the Kodiak Island Area.

Information Recorded	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Male Carapace Length.....	X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X														
Male Shell Age.....	X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X														
Female Carapace Length.....	X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X														
Female Shell Age.....	X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X														
Female Ovigerity 1/.....	X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X														
Male Legal Size Measurement..	NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....X.....X.....X.....X.....X.....X														
<b>Station Location</b>															
Latitude and Longitude.....	NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....X.....X.....X.....X.....X.....X														
Loran.....	NO....NO....NO....NO....NO....NO....NO....X.....X.....X.....X.....X.....X.....X.....X.....X														
Radar.....	NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....X.....X														
Depth by Pot.....	X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X														
Pot Set and Lift Times.....	X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X														
Bottom Type by Station.....	NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....X.....X														
Fathometer Printout.....	NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....X.....X														
Weather Data.....	X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X														
<b>Incidental Species</b>															
Counted.....	X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X														
Measured.....	X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X														
Stomach Analysis.....	NO....X.....X.....X....NO....NO....X.....X.....NO....X.....X....NO....X.....X.....X.....X.....X														
<b>Tagging Conducted</b>															
Legal Males.....	NO....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X.....X														
Sublegal Males.....	NO....NO....NO....NO....NO....NO....NO....NO....NO....X.....NO....NO....NO....NO....X....NO														
Adult Females.....	NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....NO....X....NO														

1/ Limited ovigerity examinations available 1971-1974.

X = Data available  
NO = No data available

sample of approximately 50 crabs for each category defined above if the catch occurs. This sample is taken in actual operation by estimating the number in each category as the pot is brought aboard and then choosing a sampling fraction which would yield this desired sample size. For example, if a pot were estimated to have between 120-160 crabs in a category, a sampling fraction of one of three might be used. Thus, the sample actually measured would range between 40 and 53.

The carapace lengths of king crab were measured to the nearest millimeter using Vernier calipers and recorded along with estimates of exoskeletal age and clutch size. Tanner crab were sampled as described in Donaldson and Hicks (1978, 1980). Tagging of king crab was conducted during the surveys as presented in Table 3. Measurement data for tagged crab were recorded on the Tag Release Form (Appendix C). Appendix D diagrams the sampling procedures used for the research surveys.

## RESULTS

### Historical Overview of Annual Crab Survey Abundance Estimates

During the 15-year survey history 820,618 king crab were captured from 27,358 pot lifts. The catch of male and female king crab and the survey effort each year from 1971-1985 is presented in Table 1. After standardizing effort to a 24-hour soak time, the estimated number of king crab per pot day is 1,008,250. Standardized effort statistics were generated by applying a soak correction factor to the actual number of crabs captured (Table 4).

The length frequency modes for female and male king crab generated from these annual surveys are trackable over time. Annual growth clearly moves the female mode from left to right for 8 years, first as juveniles from 1976 to 1977, then as adults from 1978 to 1985. Multi-year variability in life stages of king crab and relationships to environmental parameters are reflected in subsequent catch per pot statistics of juveniles and adults (Figures 4a -4h). The relative abundance of crabs as indexed by catch/pot was consistent with observed patterns of recruitment, natural mortality, and fishing mortality. The catchability of small crabs generally increased for their first 3 years of susceptibility to the research gear. Tracking of the mode for legal males was more complex because of increasing skipmolting with age and variable rates of fishing mortality.

There has been a decrease in king crab survey catches from 130,555 in 1977 to 4,992 in 1985. The highest and lowest relative abundance of juvenile and adult females, prerecruit males, and total crab occurred in 1977 and 1985, respectively. The highest and lowest abundance of legal crabs occurred in 1974 and 1983, respectively. The highest abundance of adult females occurred in 1978, the year after the peak in juvenile female abundance. Table 5 presents catch and standardized effort statistics of king crab captured by cohort groups.

Irregular recruitment to research pot gear has occurred for the Kodiak red king crab population throughout the survey period. Only twice in 15 years

Table 3. Legal size male king crab, *Paralithodes camtschatica*, tagging conducted during Kodiak pot surveys, 1972-1985.

Year of Release	Tag Type	Total Releases	Number of Tags Recovered By Year Following Release				Total Recoveries	Percent Recovered
			Year 1	Year 2	Year 3	Year 4+		
1972	Temporary	2,062	242	208	0	0	450	22
1973	"	6,220	1,390	592	47	0	2,029	33
1974	"	3,151	772	221	0	0	993	32
1974	Permanent	1,999	861	162	21	2	1,046	52
1975	"	4,436	1,467	288	34	12	1,801	41
1976	"	2,951	1,059	109	32	5	1,205	41
1977	"	1,724	504	158	26	0	688	40
1978	"	743	275	47	15	0	337	45
1979	"	2,043	694	116	69	0	879	43
1980	"	2,168	683	109	0	NF	792	37
1981	"	1,965	724	31	NF	NF	755	38
1982	"	1,646	519	NF	NF	NF	519	32
1983	"	1,012	NF	NF	NF	NF	NF	-
1984	"	3,575 <sup>1</sup>	NF	NF	-	-	-	-
1985	"	743	NF					
	TOTAL	36,438	9,190	2,041	244	19	11,494	36

<sup>1</sup> Includes 255 females.

NF= No commercial fishing

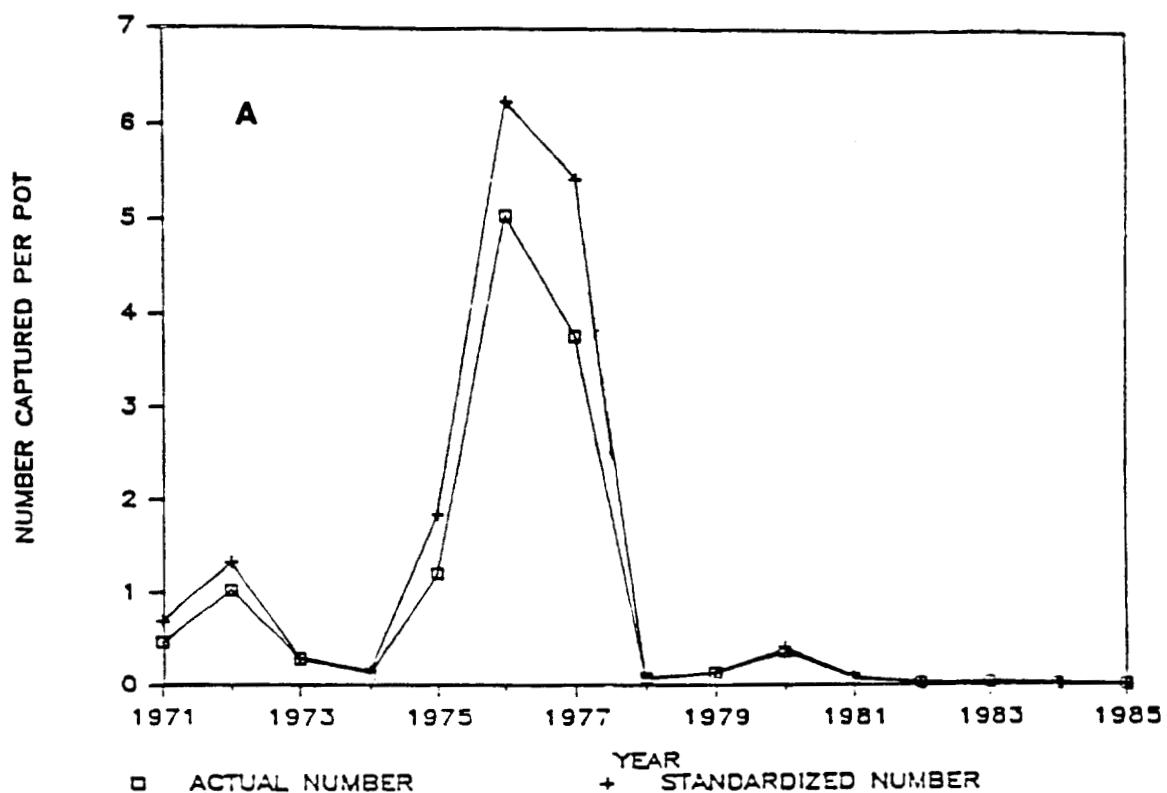
Table 4. Soak factors used to standardize individual pot soak times 1/.

<u>Days Pots Soaked</u>	<u>Soak Factor</u>
0.....	0
1.....	1.00
2.....	1.50
3.....	2.00
4.....	2.33
5.....	2.67
6.....	3.00
7.....	3.25
8.....	3.50
9.....	3.75
10+.....	4.00

i.e. A 2-day soak is equivalent to 1.5, 1-day soaks. The catch from a 1.5 day soak is divided by a soak factor of 1.25 in order to standardize that catch to a 24 hour standard.

1/ Rothschild et al. (1970).

## PRERECRUIT FOURS



## PRERECRUIT THREES

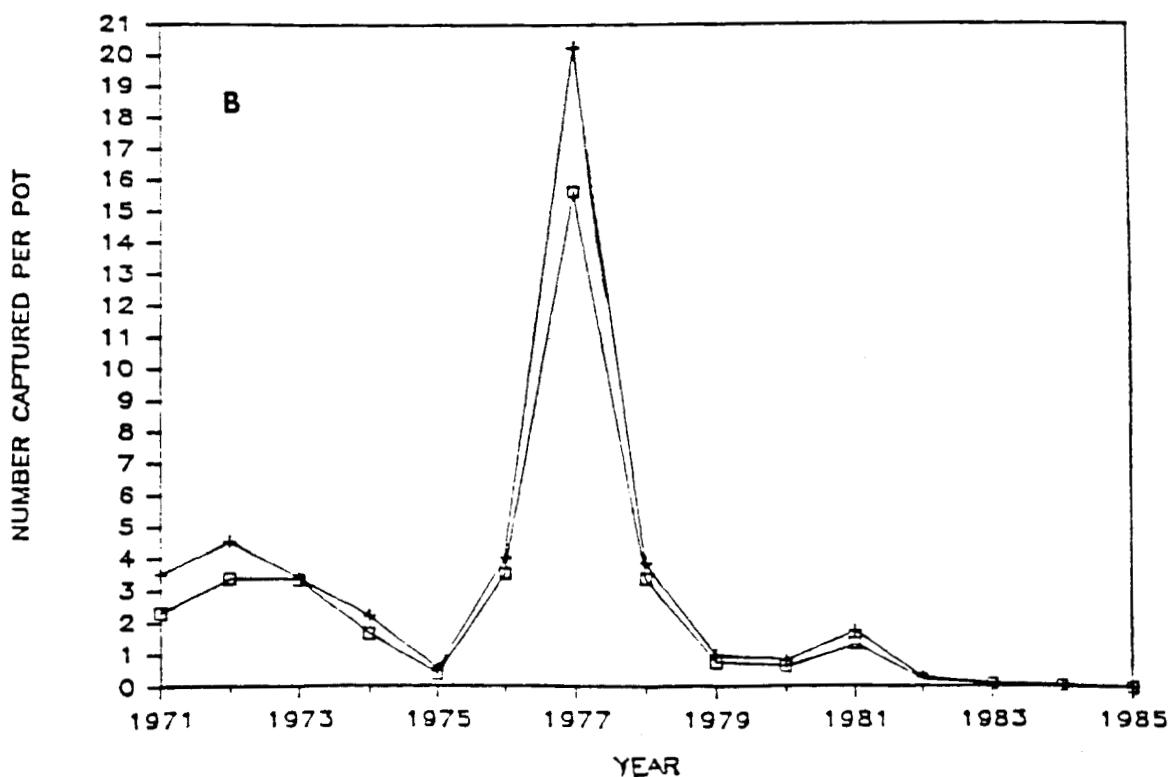
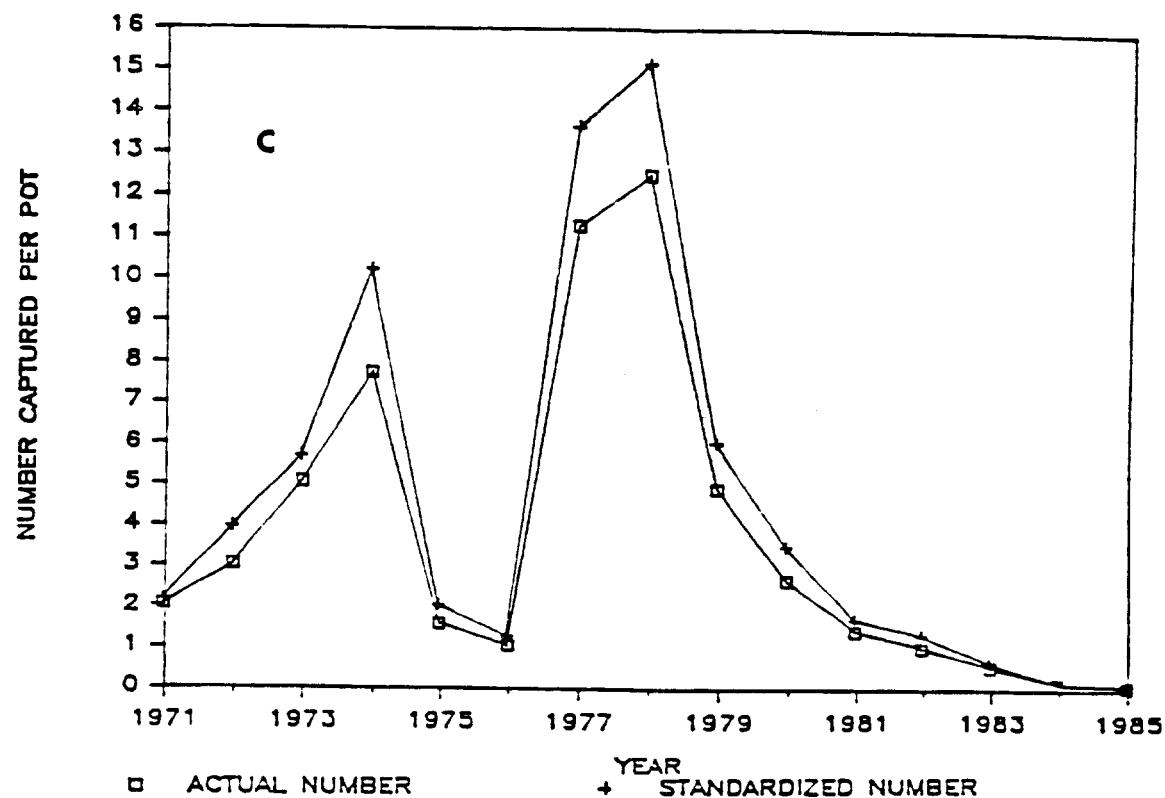


Figure 4a and 4b. Number of prerecruit four and prerecruit three king crab, *Paralithodes camtschatica*, captured per pot during Kodiak crab population studies (1971-1985).

## PRERECRUIT TWOS



## PRERECRUIT ONES

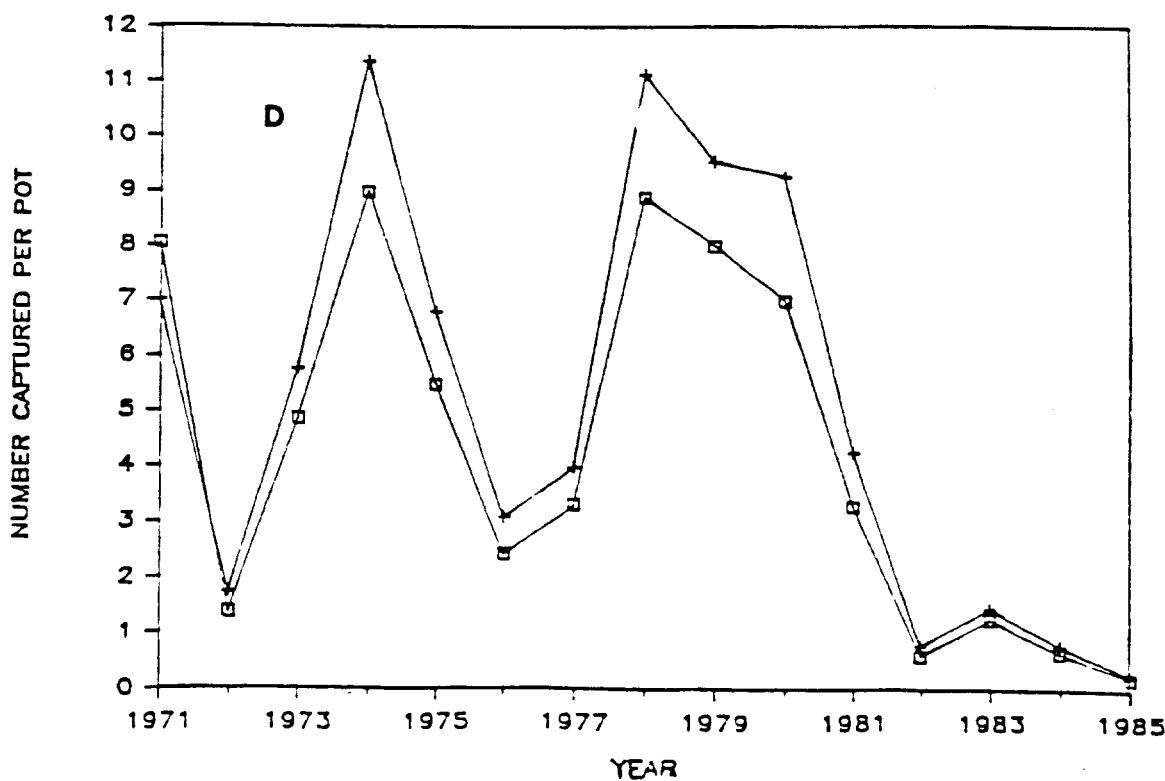
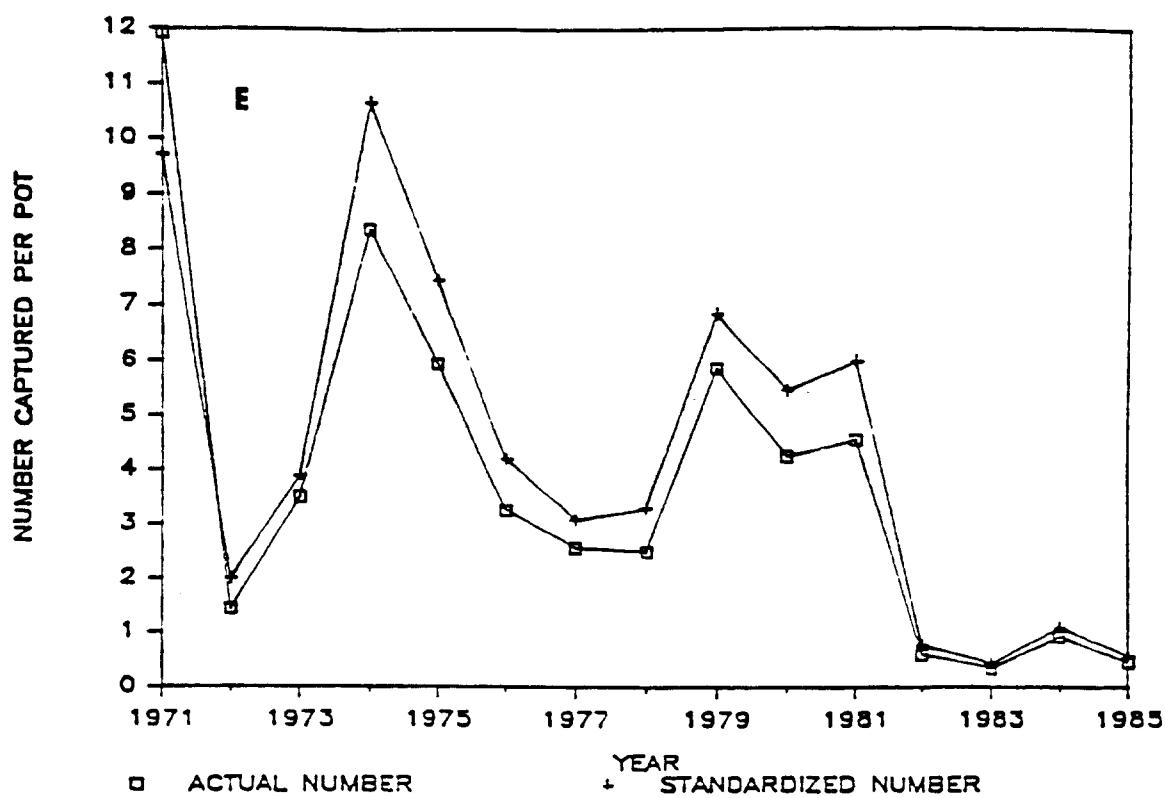


Figure 4c and 4d. Number of prerecruit two and prerecruit one king crab, *Paralithodes camtschatica*, captured per pot during Kodiak crab population studies (1971-1985).

## RECRUITS



## POSTRECRUITS

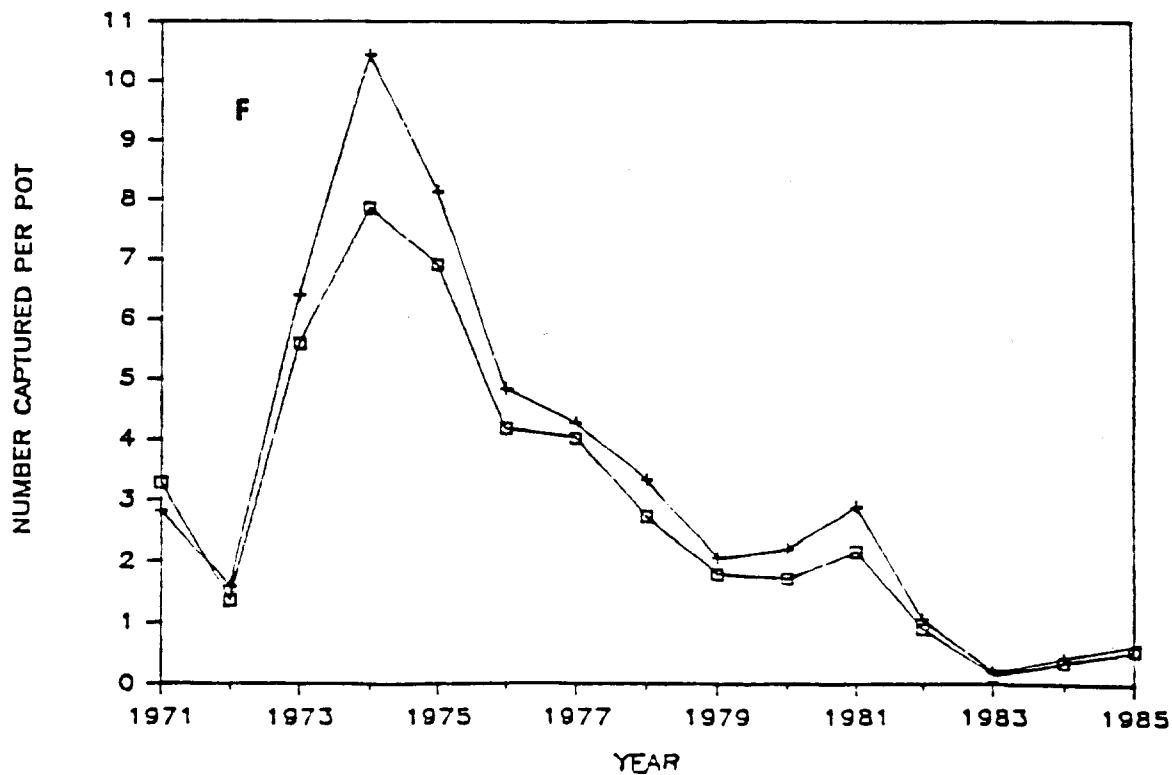
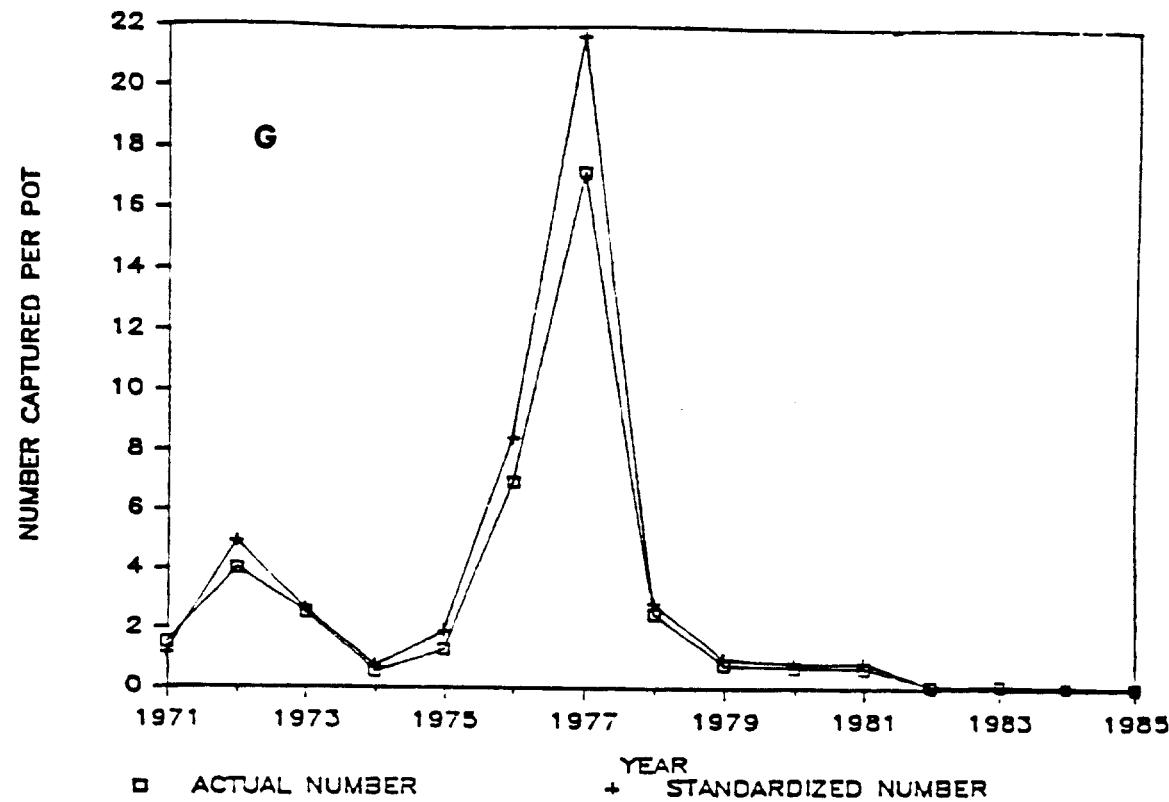


Figure 4e and 4f. Number of recruit and postrecruit king crab, *Paralithodes camtschatica*, captured per pot during Kodiak crab population studies (1971-1985).

# JUVENILES



# ADULTS

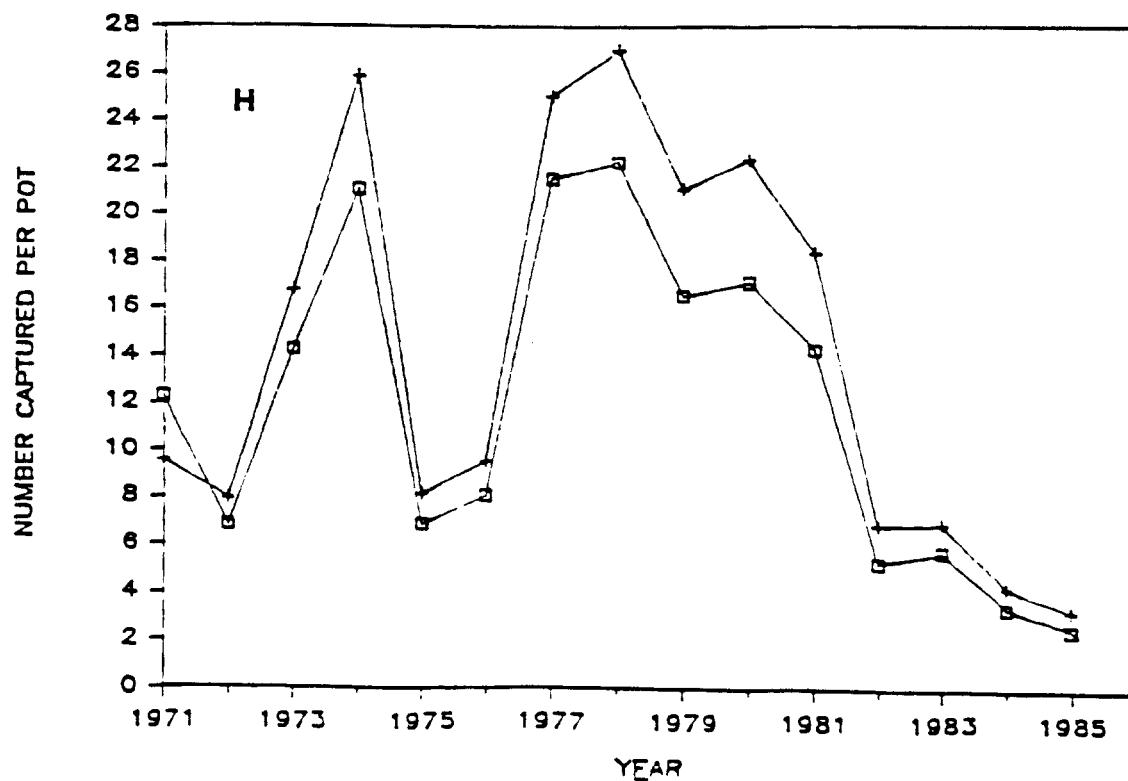


Figure 4g and 4h. Number of juvenile and adult king crab, *Paralithodes camtschatica*, captured per pot during Kodiak crab population studies (1971-1985).

Table 5. Actual number (A) and standardized effort statistic (S) of red king crab, *Paralithodes camtschatica*, captured during Kodiak crab population studies (1971-1985).

	YEAR	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	TOTALS
	POT LIFTS	583	2391	1990	2017	1895	1946	1646	895	1709	2339	1793	1721	2091	3118	1384	27357 POTS
<b>SEX/SIZE</b>																	
<sup>2</sup>																	
(MM LENGTH)																	
<b>MALE FOURS</b>																	
L/E 90	A=	233	2448	566	219	2274	9774	6181	66	229	832	105	36	55	39	3	23068
L/E 94	S=	351	3177	568	298	3479	12123	8908	69	235	941	146	42	78	49	4	38444
<b>MALE THREES</b>																	
91-100	A=	1158	8131	6654	3272	698	6851	25791	3082	1267	1432	2383	365	158	183	7	61336
95-112	S=	1773	10917	6756	4432	1009	7007	33410	3436	1633	1863	3105	489	286	231	9	77078
<b>MALE TWOS</b>																	
109-126	A=	1037	7287	10118	15614	3005	2066	18541	11176	8443	6236	2545	1747	1148	358	57	89378
113-130	S=	1099	9499	11398	20622	3855	2486	22462	13565	10397	8196	3052	2279	1308	432	72	110706
<b>MALE ONES</b>																	
127-144	A=	4050	3278	9647	18105	10337	4686	5407	7957	13650	16325	5826	1023	2627	2048	273	105231
SUBLEGALS S/E 131	S=	3525	4148	11438	22935	12822	5975	6499	9965	16286	21647	7565	1317	3018	2458	337	129927
<b>MALE RECRUITS</b>																	
145-163 N.S	A=	5991	3423	6966	16879	11249	6312	4218	2233	10016	9945	8170	1023	706	2919	589	90639
LEGALS L/E 164	S=	4886	4779	7763	21523	14123	8151	5050	2953	11692	12736	10725	1314	873	3444	727	110739
<b>MALE POST REC.S</b>																	
G/E 145 PLUS ALL OTHERS	A=	1650	3248	11135	15826	13078	8173	6662	2467	3099	4046	3918	1561	314	1133	743	77053
ALL LEGALS NOT RECRUITS	S=	1420	3791	12728	21049	15411	9454	7068	3008	3551	5219	5244	1842	406	1395	892	92480
<b>FEMALE JUV.S</b>																	
A=	767	9678	5077	1098	2448	13469	28233	2238	1329	1628	1187	98	185	172	14	67621	
S=	598	11866	5302	1503	3624	16346	35758	2559	1700	1917	1515	127	234	216	18	83279	
<b>FEMALE ADULTS</b>																	
A=	6180	16336	28262	42431	12827	15549	35522	19918	28333	40132	25628	9184	12877	10703	3306	306308	
S=	4820	18977	33320	52248	15210	18353	41334	24175	36079	52288	32956	11757	14522	13271	4277	373597	
		1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	
TOTAL MALES	A=	14119	27815	45006	69915	40633	37862	66800	26901	36704	38816	22947	5755	4992	6672	1672	
TOTAL FEMALES	A=	6947	26014	33339	43529	15275	29818	63755	22156	29662	41760	26815	9202	12262	18875	3320	
TOTAL MALES	S=	13054	36311	50643	98851	50639	4596	83389	32996	43794	50602	29837	7283	5877	8001	2041	
TOTAL FEMALES	S=	5418	38643	38622	53751	18834	34699	77884	26734	37779	54205	34475	11894	14756	13487	4295	
GRAND TOTALS BY YEAR	A=	21066	53829	78425	113444	55908	66800	130555	49057	66366	80576	49762	14957	17254	17547	4992	820618
	S=	18472	67154	89265	144682	69533	80695	160473	59738	81573	104887	64312	19177	20633	21488	6336	1008298

<sup>1</sup> INCLUDES ALL STATIONS FISHED--STANDARD, NON-STANDARD AND RESURVEYS.

<sup>2</sup> SIZE CATEGORIES CHANGED BETWEEN 1979 AND 1980. TOP NUMBERS REPRESENT SIZES USED PRIOR TO AND INCLUDING 1979. BOTTOM NUMBERS ARE SIZE GROUPS USED AFTER 1979.

(1972 and 1977) did a large catch of very small (three's and four's) crab occur indicating the initial appearance of a dominant year class. These year classes of crab formed the bulk of the male and female population in the ensuing years. Eight consecutive years of below average recruitment of small crab began in 1978. The lowest abundance of recruit male crabs occurred in 1982 and 1983.

Incidental Catch of Pacific Cod, *Gadus macrocephalus*, and Pacific Halibut, *Hippoglossus stenolepis*

The incidental catches of Pacific cod and Pacific halibut have been recorded on each of the annual surveys. Catch per pot of cod has ranged from 0.5 in 1972 to 5.7 in 1983 (Table 6). For halibut the catch per pot rates have always been lower than cod in identical survey years. These figures range from 0.1 in 1972 and 1973 to a peak in 1985 of 1.3 halibut per pot.

For all survey years combined approximately 14,000 cod stomachs were examined with less than 1% containing king crab parts. No live halibut were dissected to study stomach contents.

Survey Results - Graphic Representation

We present survey results including frequency of fishing and catch by size group and sex on geographic area charts which are ordered in this report in a north, east, south, and west arrangement. The entire Kodiak Archipelago is covered on these individual charts for the years 1972 through 1985.

Frequency of fishing (number of years that individual stations were fished) and catch data are presented as follows:

- 1) Figures 5a-e present the frequency of ocean station research fishing.
- 2) Figures 6a-j present the frequency of bay station research fishing. (The data in Figures 5 and 6 document the number of times [years] that individual research stations were fished).
- 3) Figures 7a-o present the highest average standardized number (standardized effort statistic) of legal male and adult female king crab captured at each individual survey station.
- 4) Figures 8a-o present the highest average standardized number (standardized effort statistic) of prerecruit male king crab captured at each individual survey station.
- 5) Figures 9a-o present the highest average standardized number (standardized effort statistic) of juvenile female king crab captured at each individual survey station. (Figures 7-9 show the most productive research fishing on an individual station level).
- 6) Figures 10a-54 present, by area, the average standardized number (standardized effort statistic) of: a) legal male and adult female, b) prerecruit male and, c) juvenile female king crab captured per pot at individual research stations each single year from 1972 through 1985.

Table 6. Incidental catch of Pacific cod, *Gadus macrocephalus*, and Pacific halibut, *Hippoglossus stenolepis*, during Kodiak crab population studies, 1971-1985.

Year	Pots	Pacific Cod		Pacific Halibut		Avg. Length (cm)
		Number	Per Pot	Number	Per Pot	
1971 <sup>1</sup>	503	339	1.5	261	0.5	90
1972	2,391	1,215	0.5	352	0.1	84
1973	1,990	1,853	0.9	276	0.1	89
1974	2,017	5,143	2.5	411	0.2	93
1975	1,895	2,614	1.4	324	0.2	86
1976	1,946	1,946	1.4	579	0.3	86
1977	1,646	1,646	1.6	452	0.3	88
1978 <sup>1</sup>	895	895	3.3	212	0.2	87
1979 <sup>1</sup>	963	1,053	1.1	230	0.2	88
1980	2,339	5,003	2.1	1,318	0.6	95
1981	1,793	3,392	1.9	1,050	0.6	91
1982	1,721	5,859	3.4	1,027	0.6	93
1983	2,091	12,009	5.7	1,690	0.8	86
1984 <sup>2</sup>	1,993	6,374	3.2	2,035	1.0	93
1985	1,304	4,025	3.1	1,638	1.3	84

<sup>1</sup>In 1971 only a small portion of the south end was fished. In 1978 there was no fishing in the north end. In 1979 all data are from the south end.

<sup>2</sup>Data from standard stations only.

#### ACKNOWLEDGMENTS

Mary Ellen Harris and Larry Greer provided assistance with computer generated graphs and data. Jerry McCrary and Forrest Blau provided editorial assistance.

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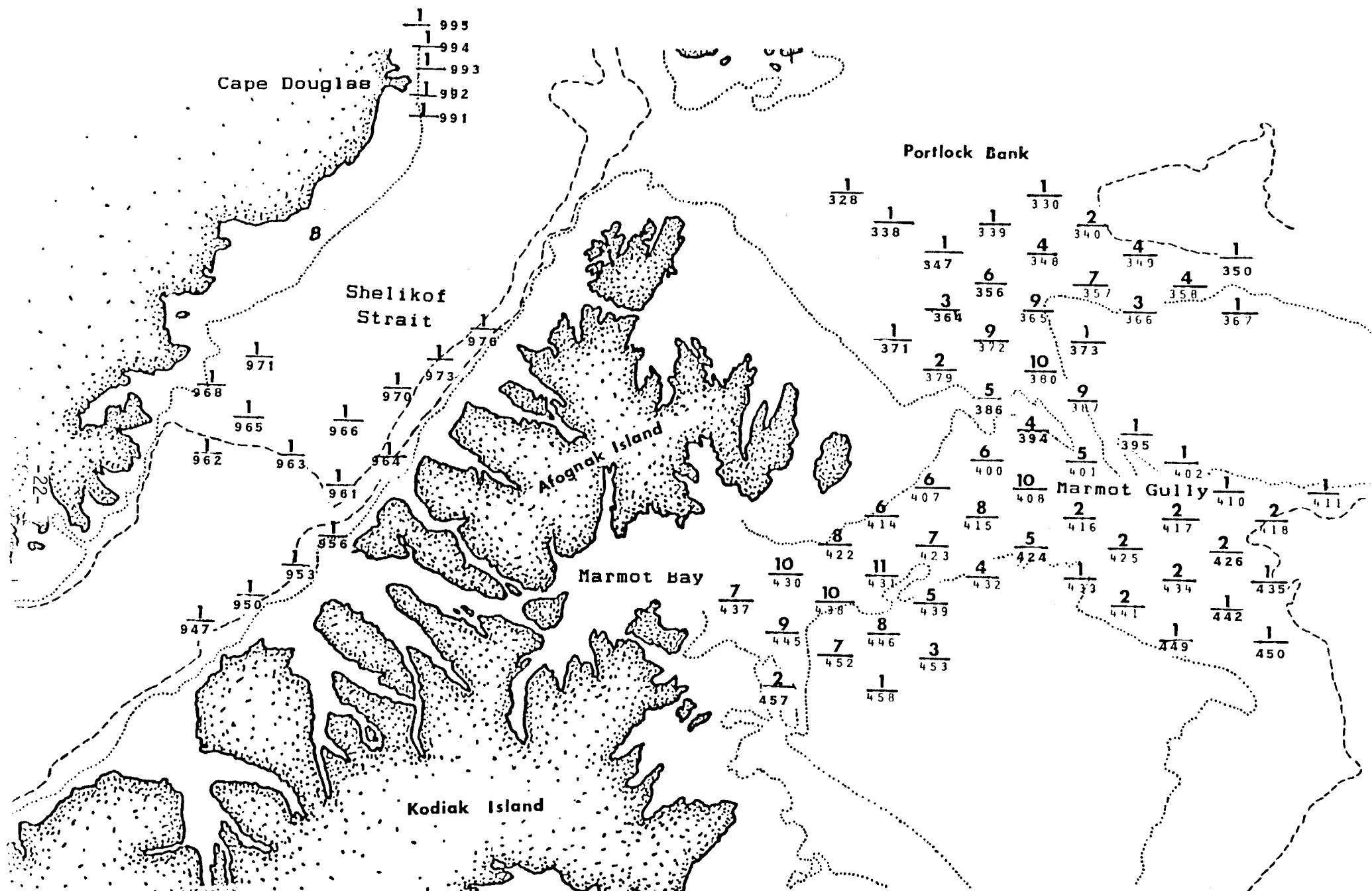


Figure 5a. Frequency of ocean station research fishing at Portlock Bank, Outer Marmot and Shelikof Strait; Kodiak Island (1972-1985).

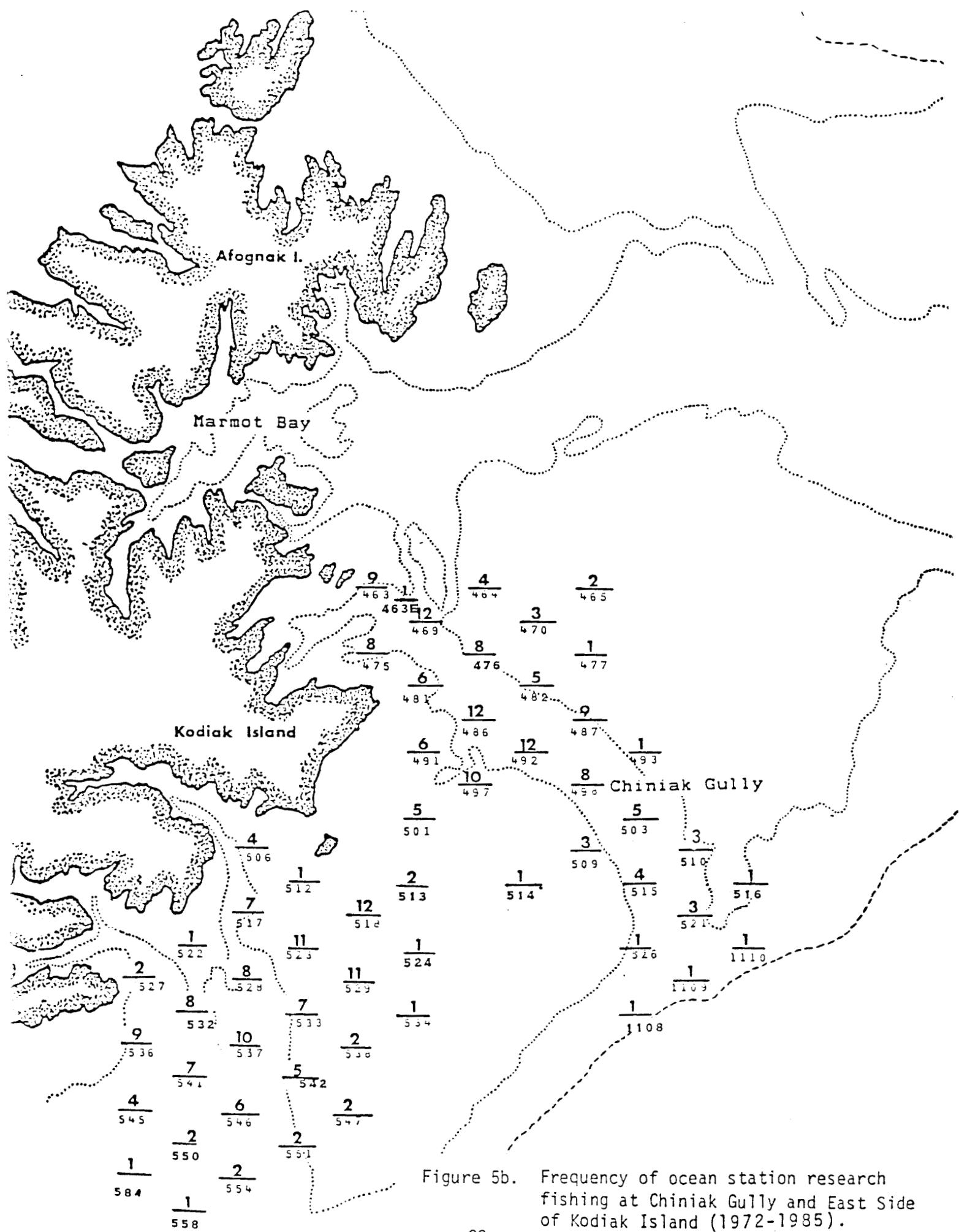


Figure 5b. Frequency of ocean station research fishing at Chiniak Gully and East Side of Kodiak Island (1972-1985).

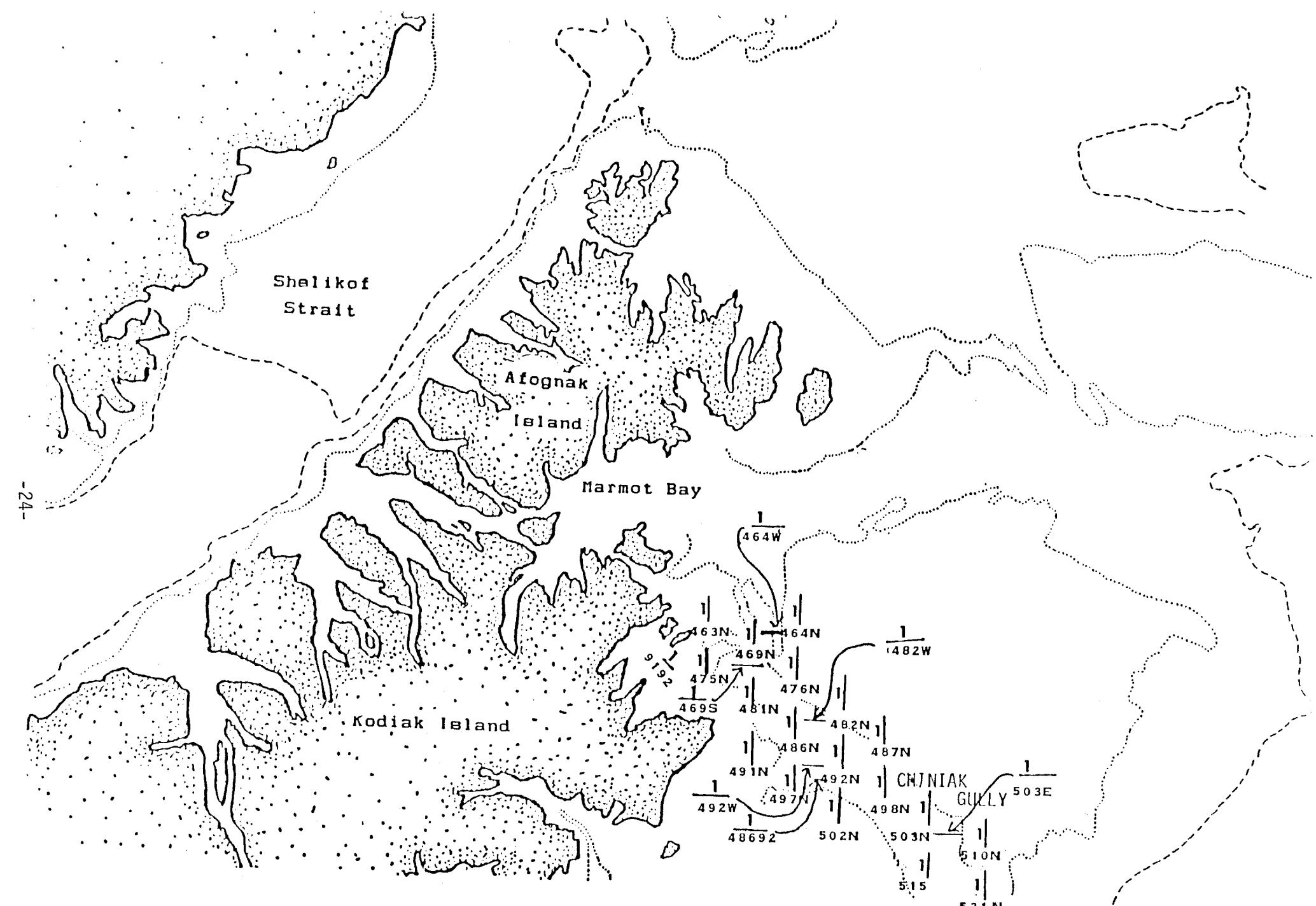


Figure 5c. Frequency of ocean station research fishing at non-standard stations at Chiniak Gully, Kodiak Island, (1984).

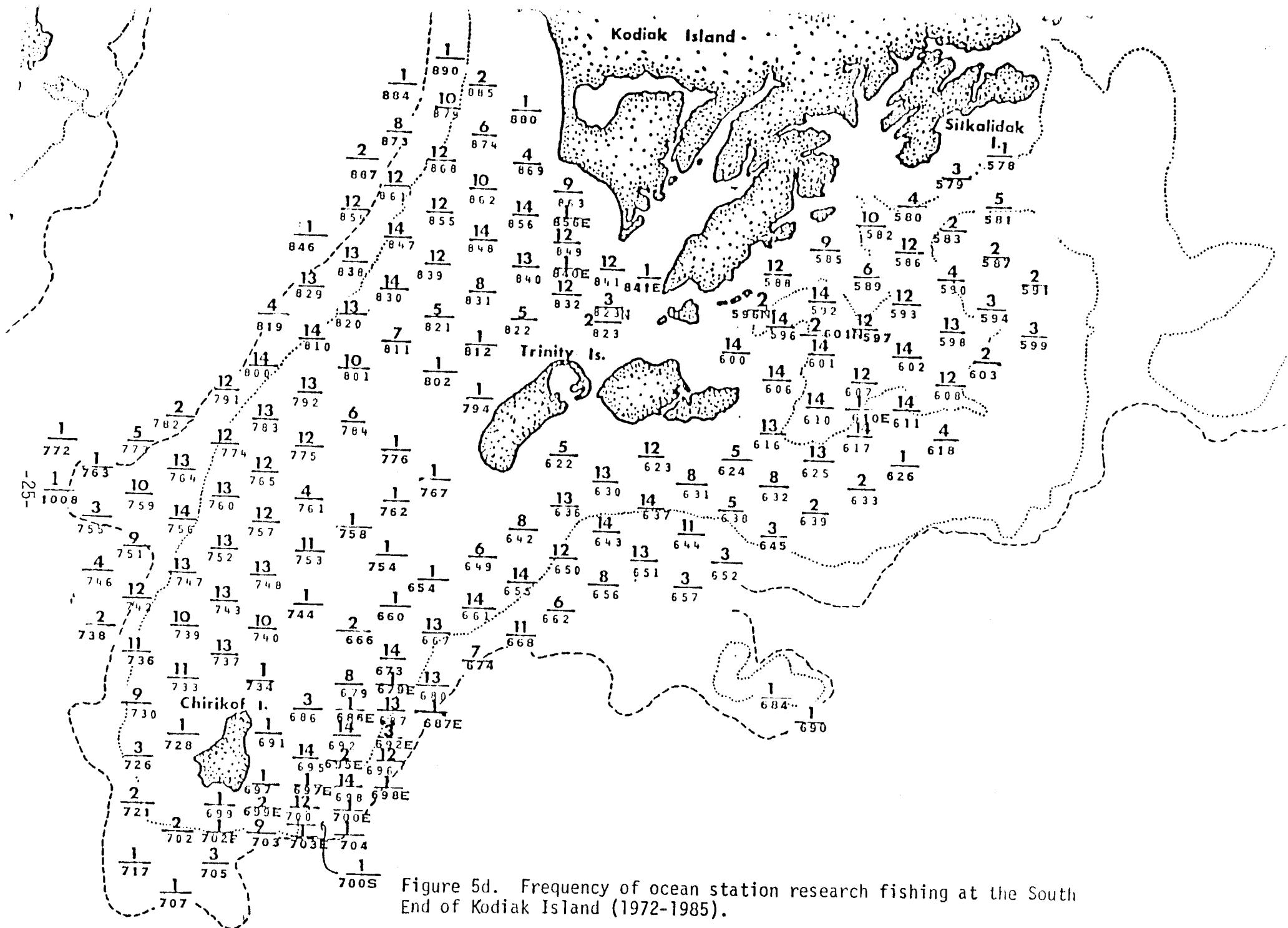
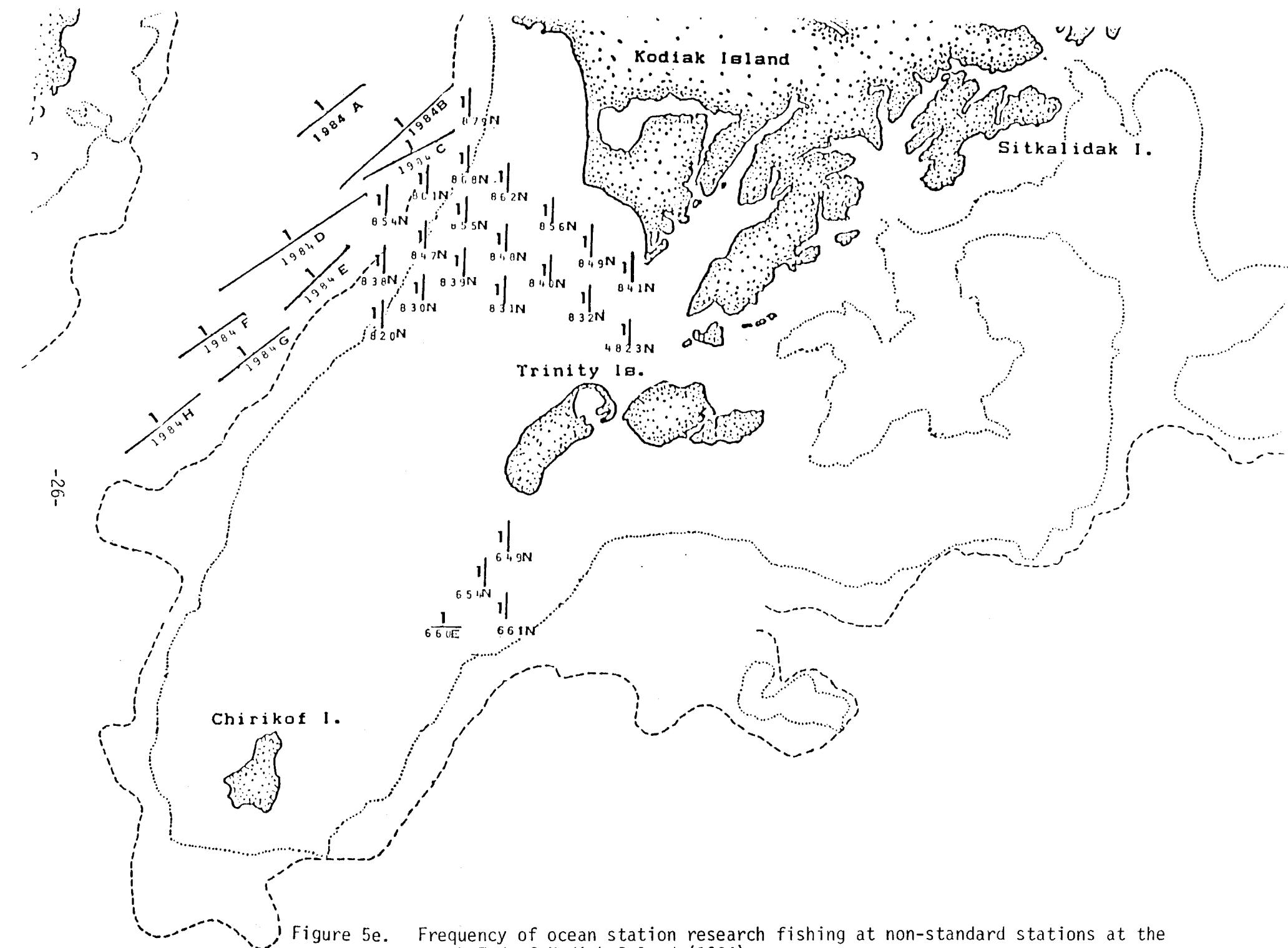


Figure 5d. Frequency of ocean station research fishing at the South End of Kodiak Island (1972-1985).



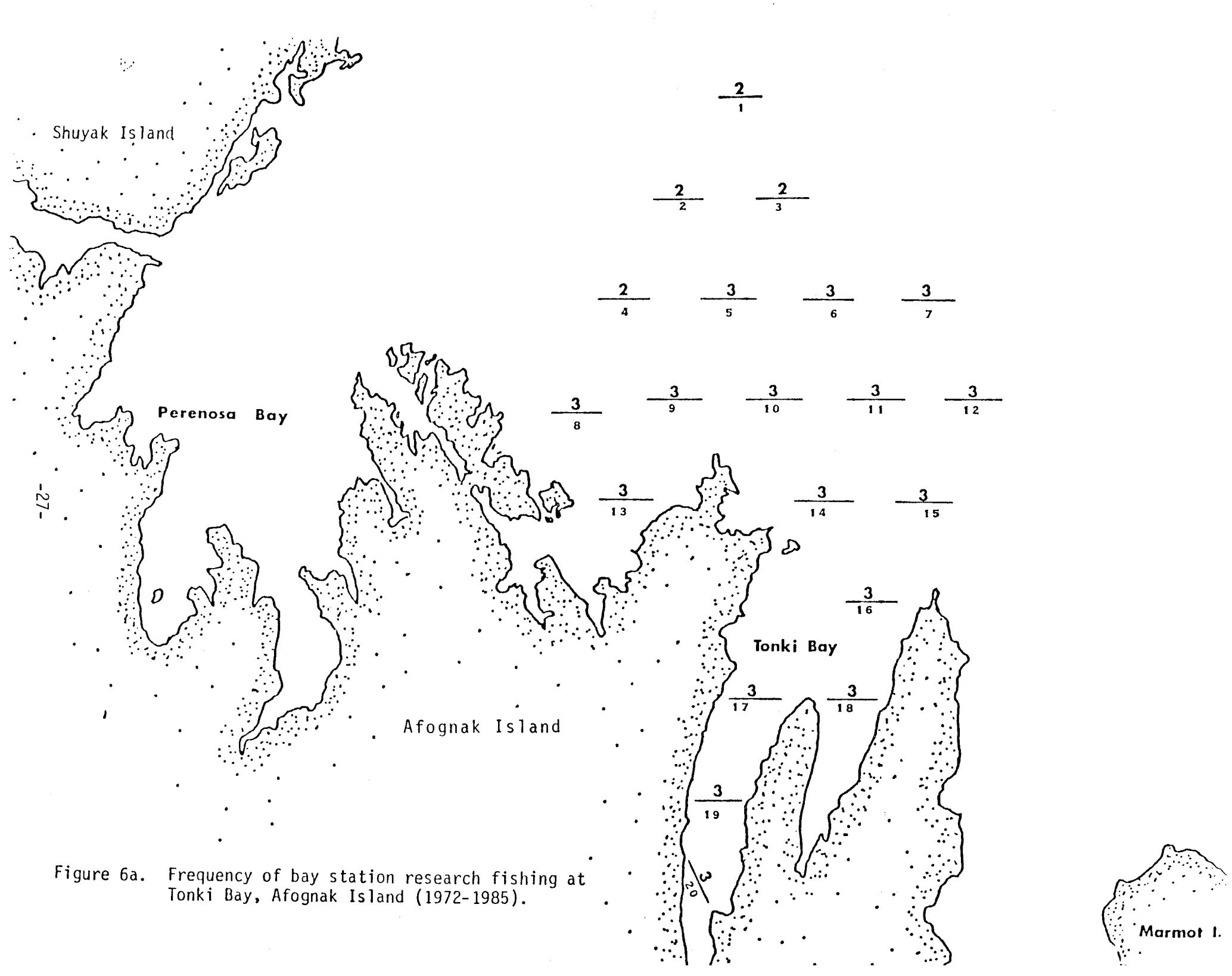


Figure 6a. Frequency of bay station research fishing at Tonki Bay, Afognak Island (1972-1985).

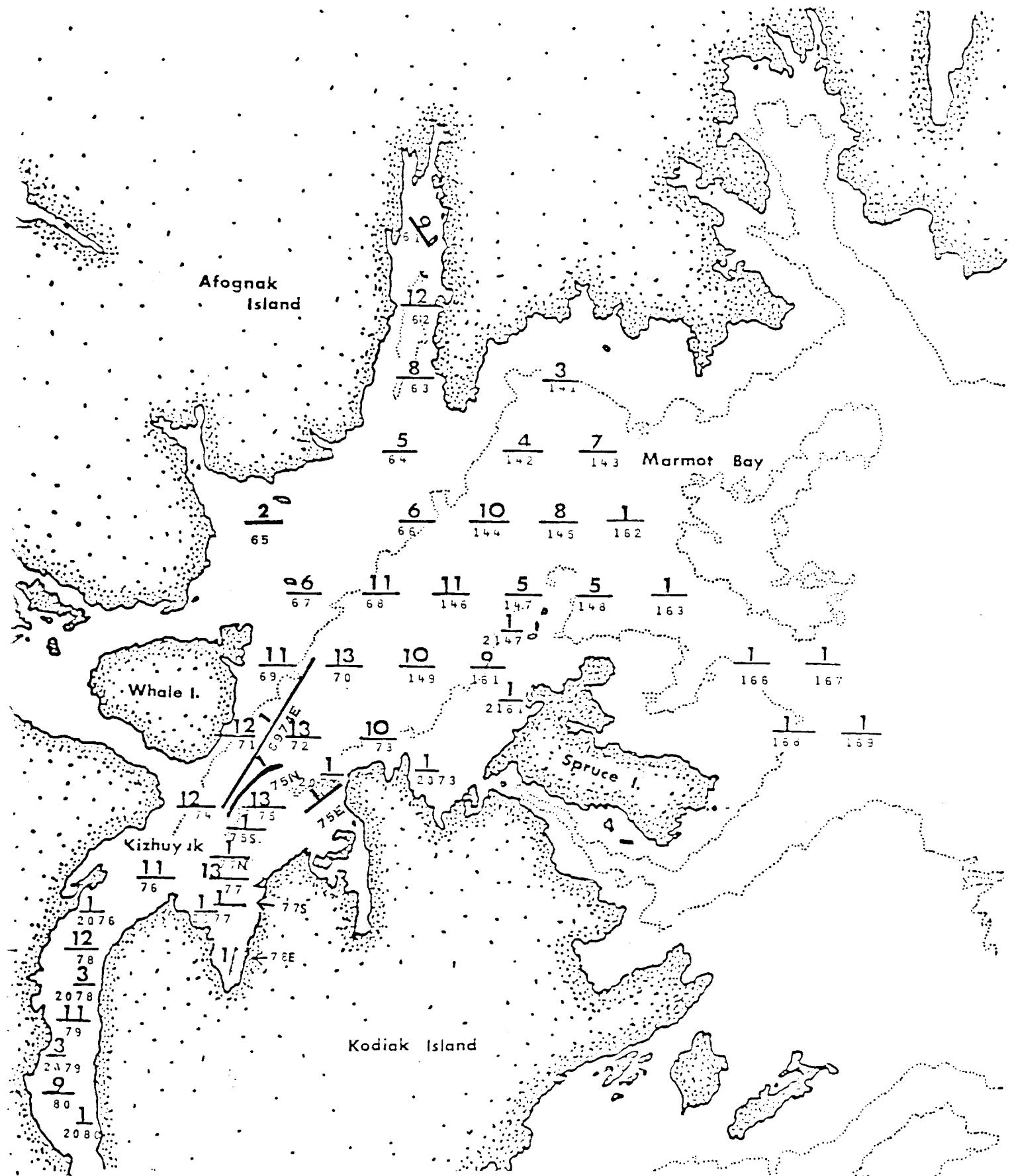


Figure 6b. Frequency of bay station research fishing at Marmot and Kizhuyak Bays, Kodiak Island (1972-1985).

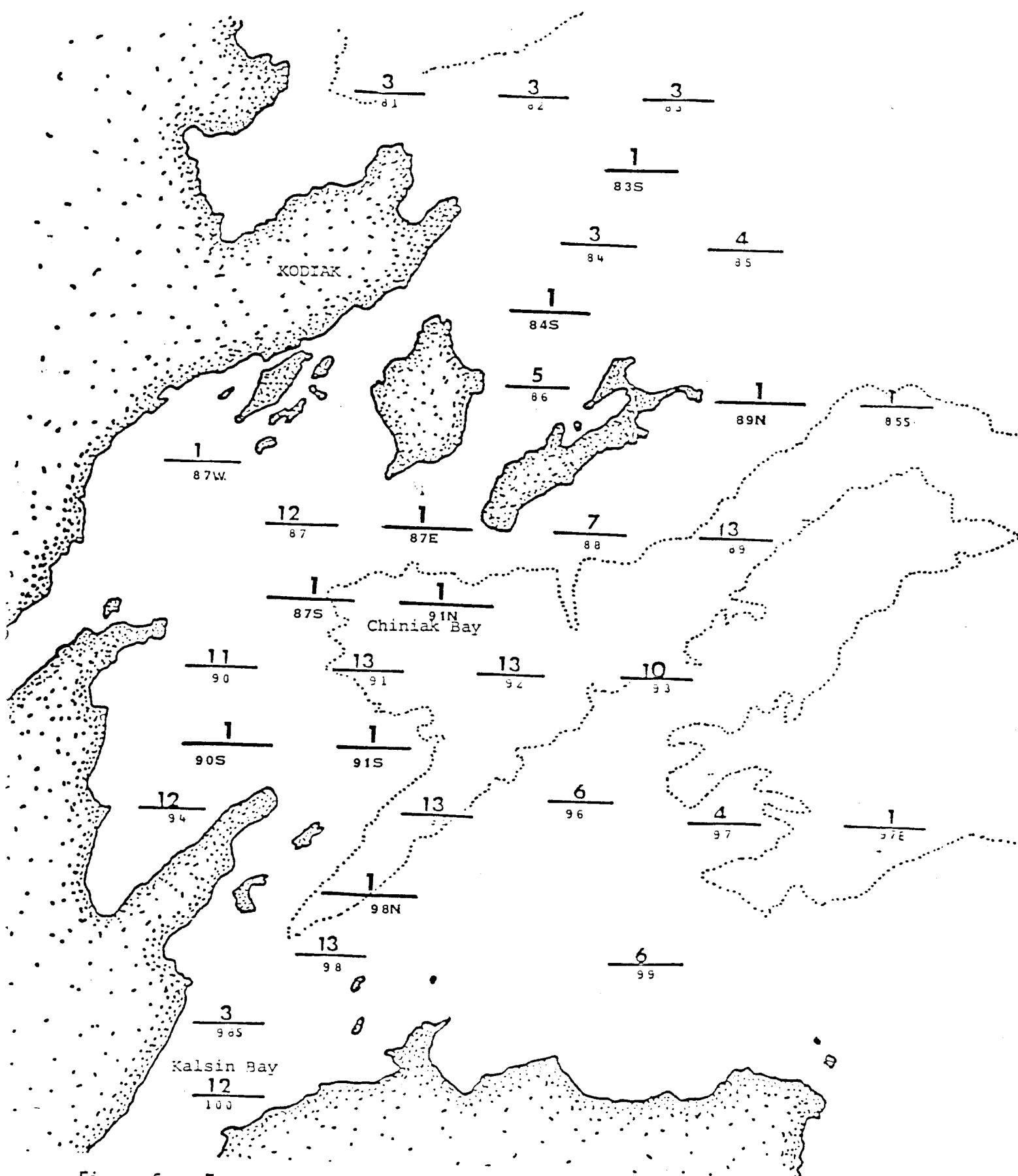


Figure 6c. Frequency of bay station research fishing at Chiniak Bay, Kodiak Island (1972-1985).

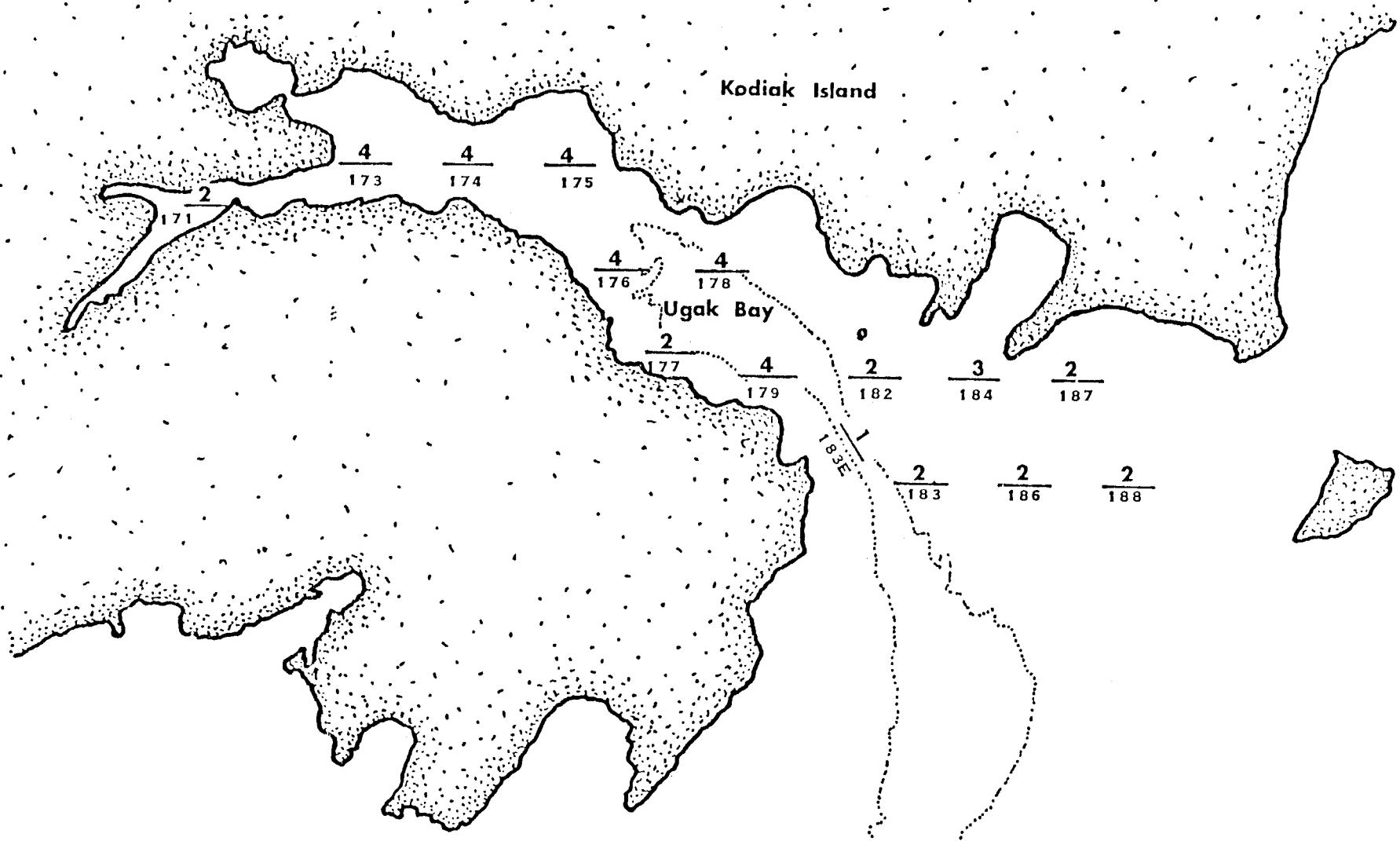


Figure 6d. Frequency of bay station research fishing at Ugak Bay, Kodiak Island (1972-1985).

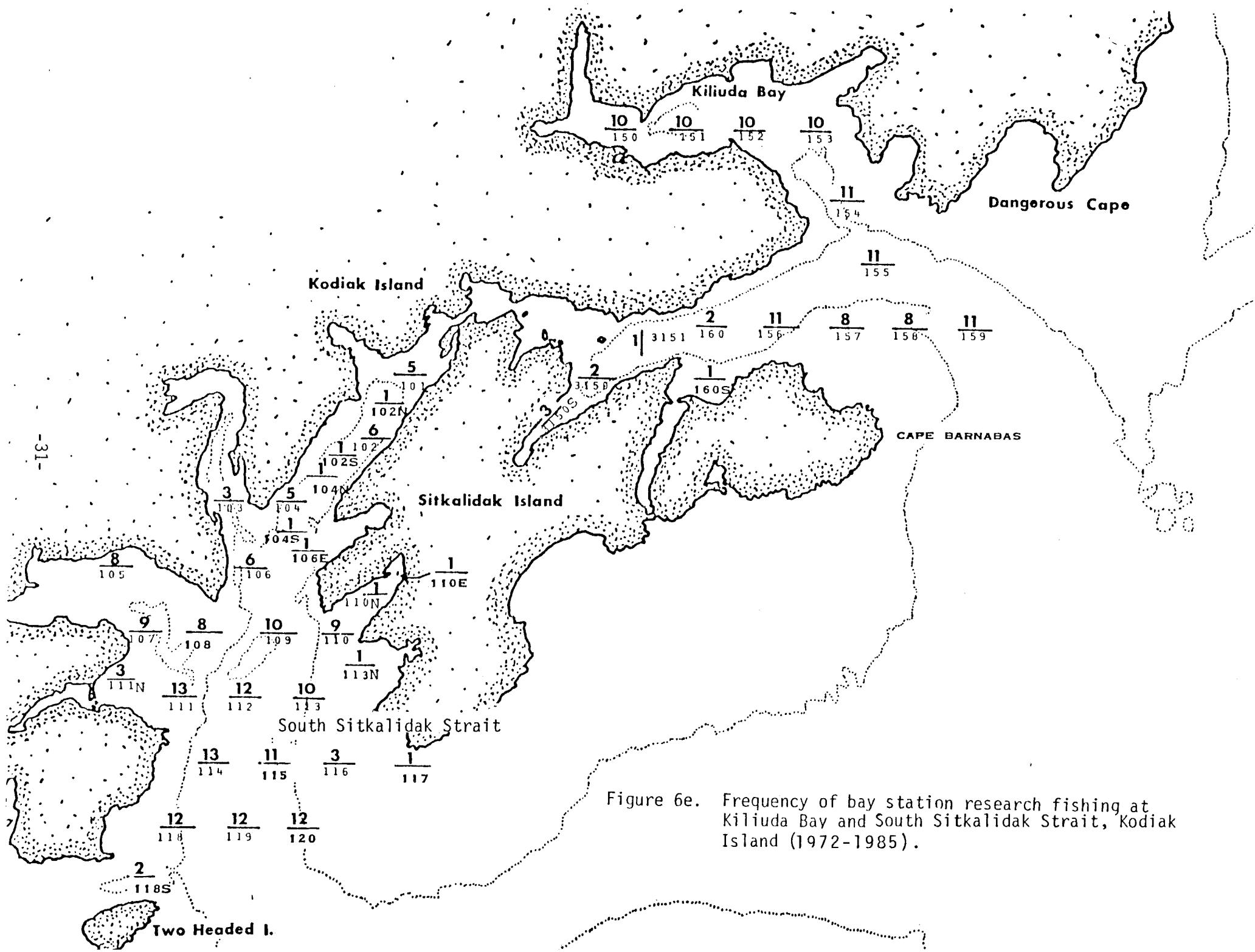


Figure 6e. Frequency of bay station research fishing at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1972-1985).

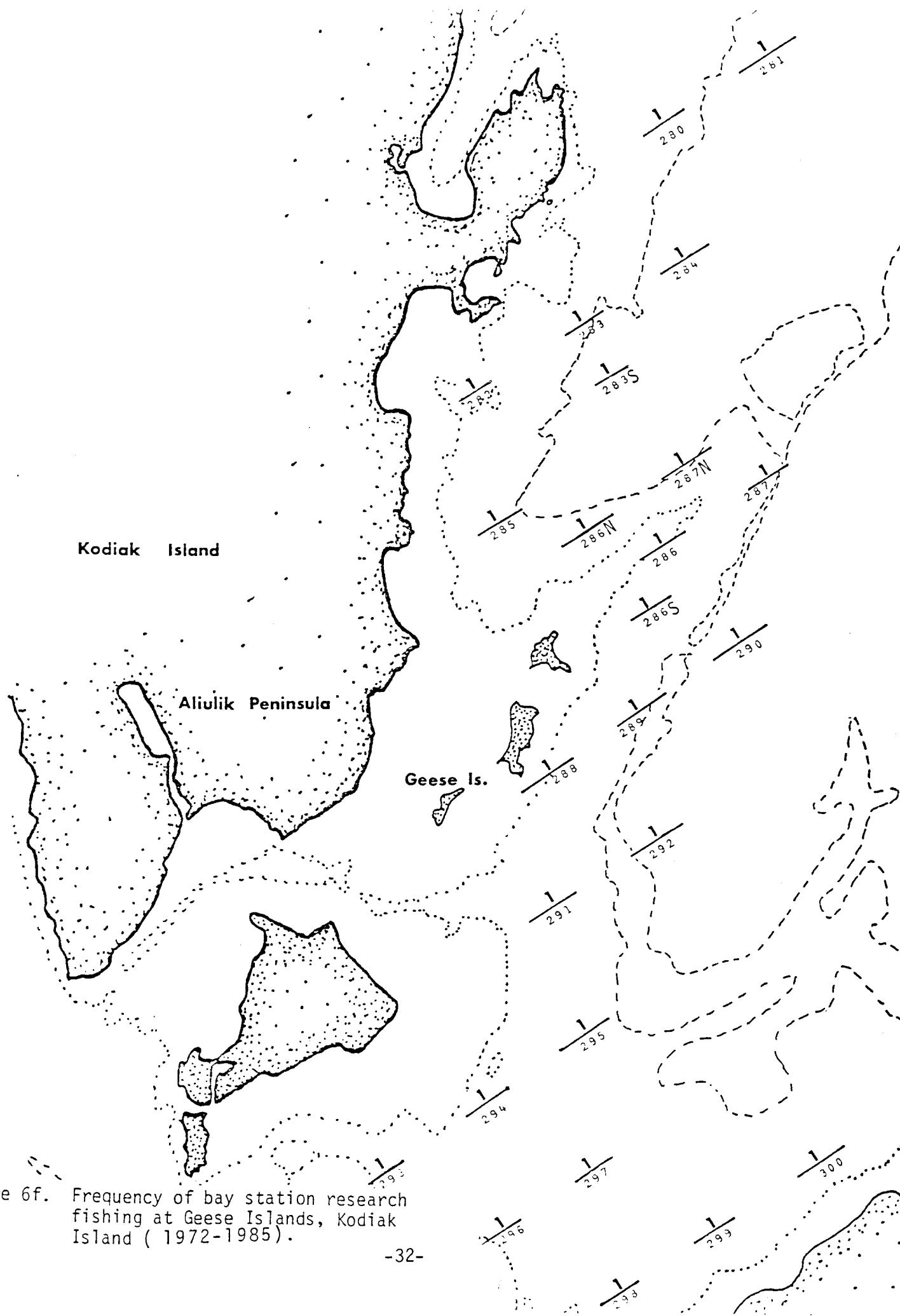


Figure 6f. Frequency of bay station research fishing at Geese Islands, Kodiak Island (1972-1985).

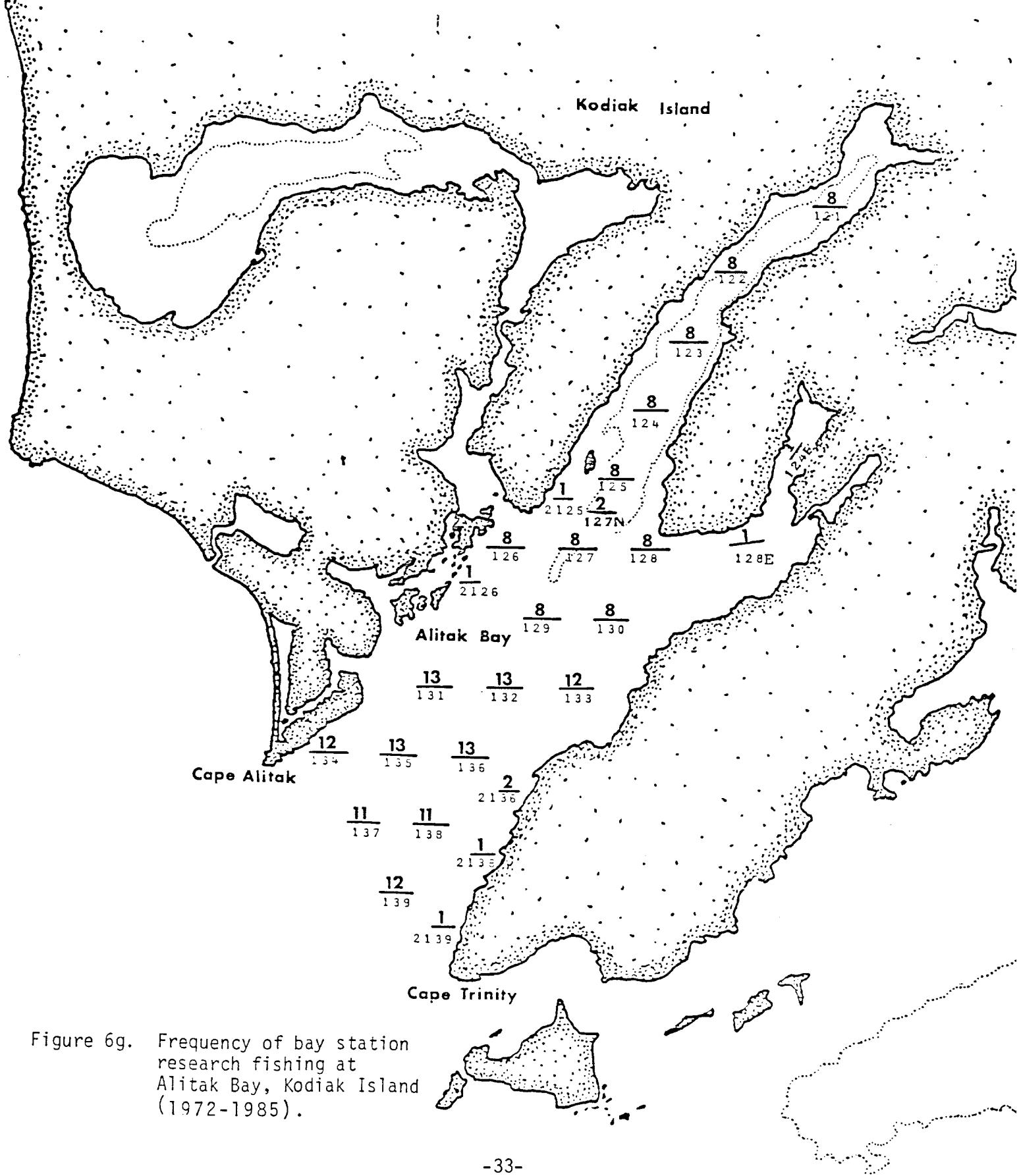


Figure 6g. Frequency of bay station research fishing at Alitak Bay, Kodiak Island (1972-1985).

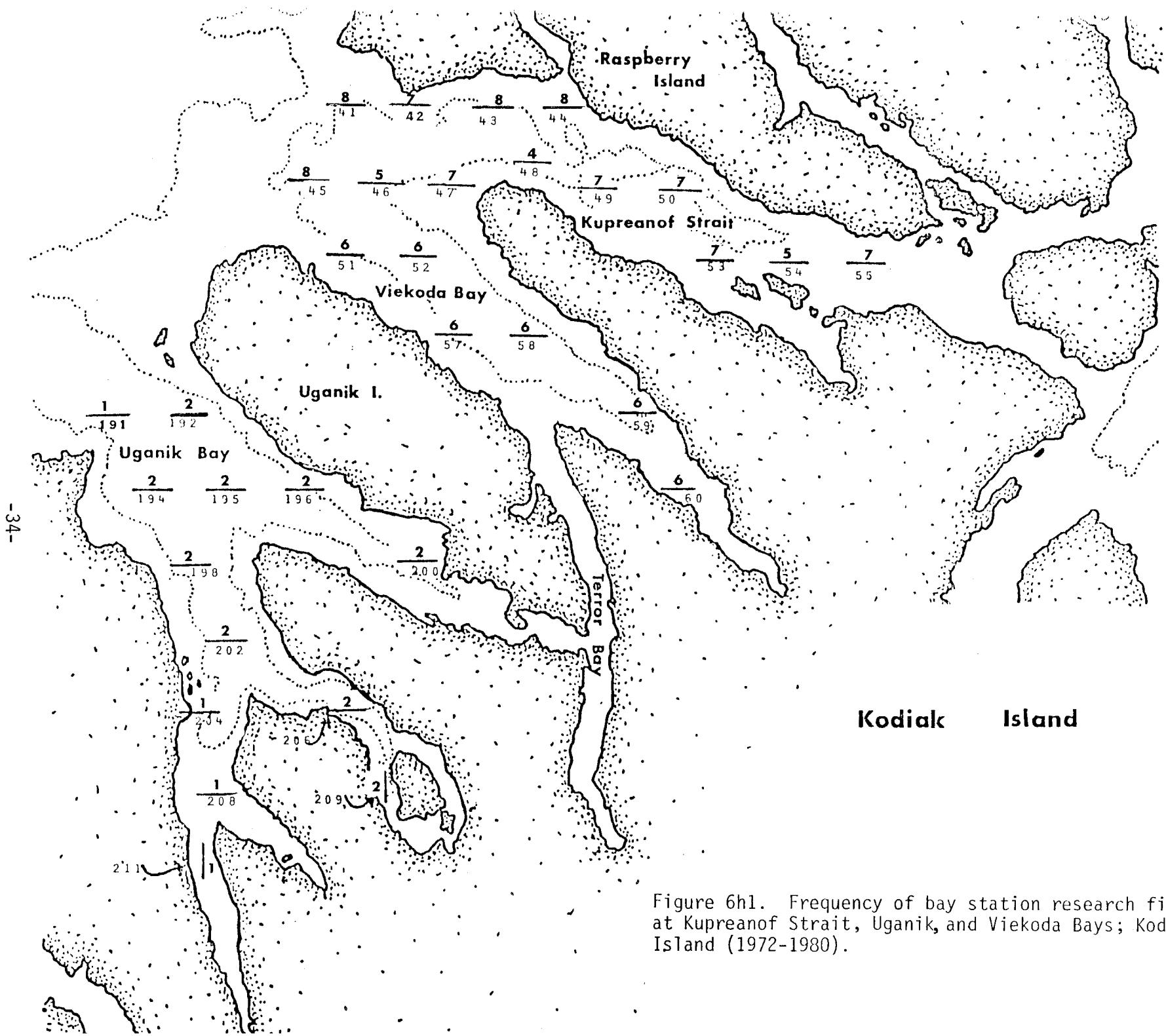
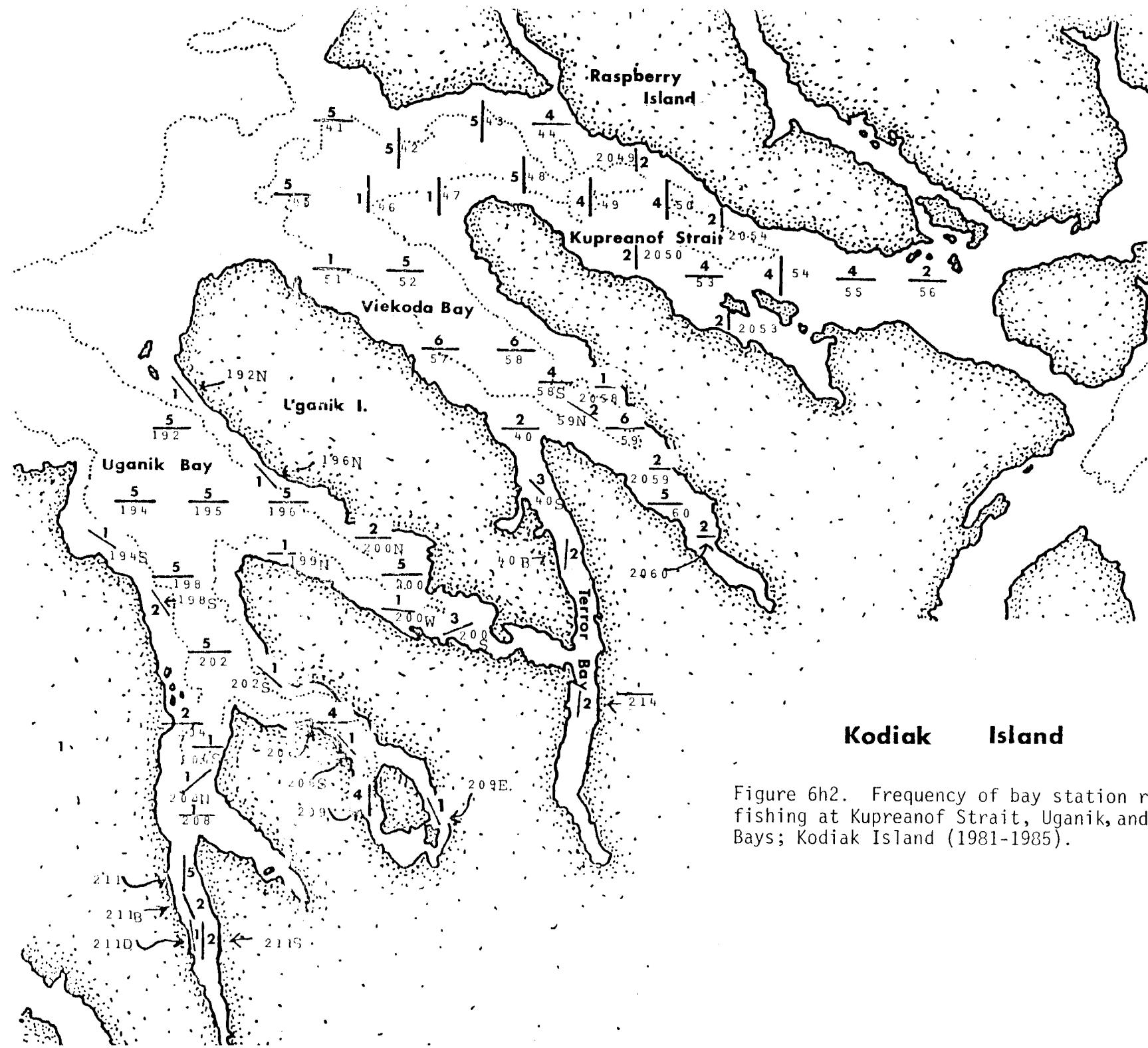


Figure 6h1. Frequency of bay station research fishing at Kupreanof Strait, Uganik, and Viekoda Bays; Kodiak Island (1972-1980).



## Kodiak Island

Figure 6h2. Frequency of bay station research fishing at Kupreanof Strait, Uganik, and Viekoda Bays; Kodiak Island (1981-1985).

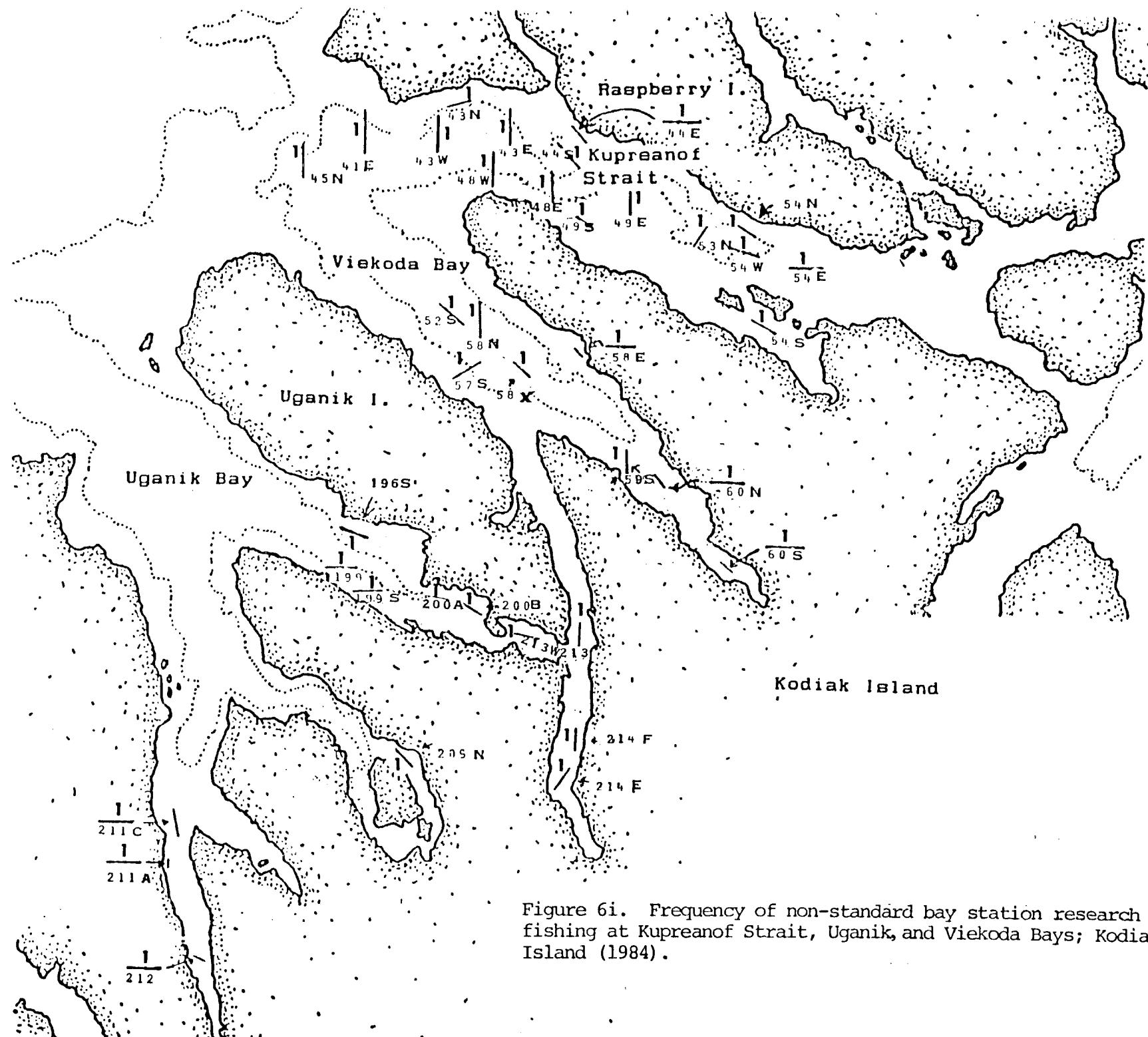


Figure 6i. Frequency of non-standard bay station research fishing at Kupreanof Strait, Uganik, and Viekoda Bays; Kodiak Island (1984).

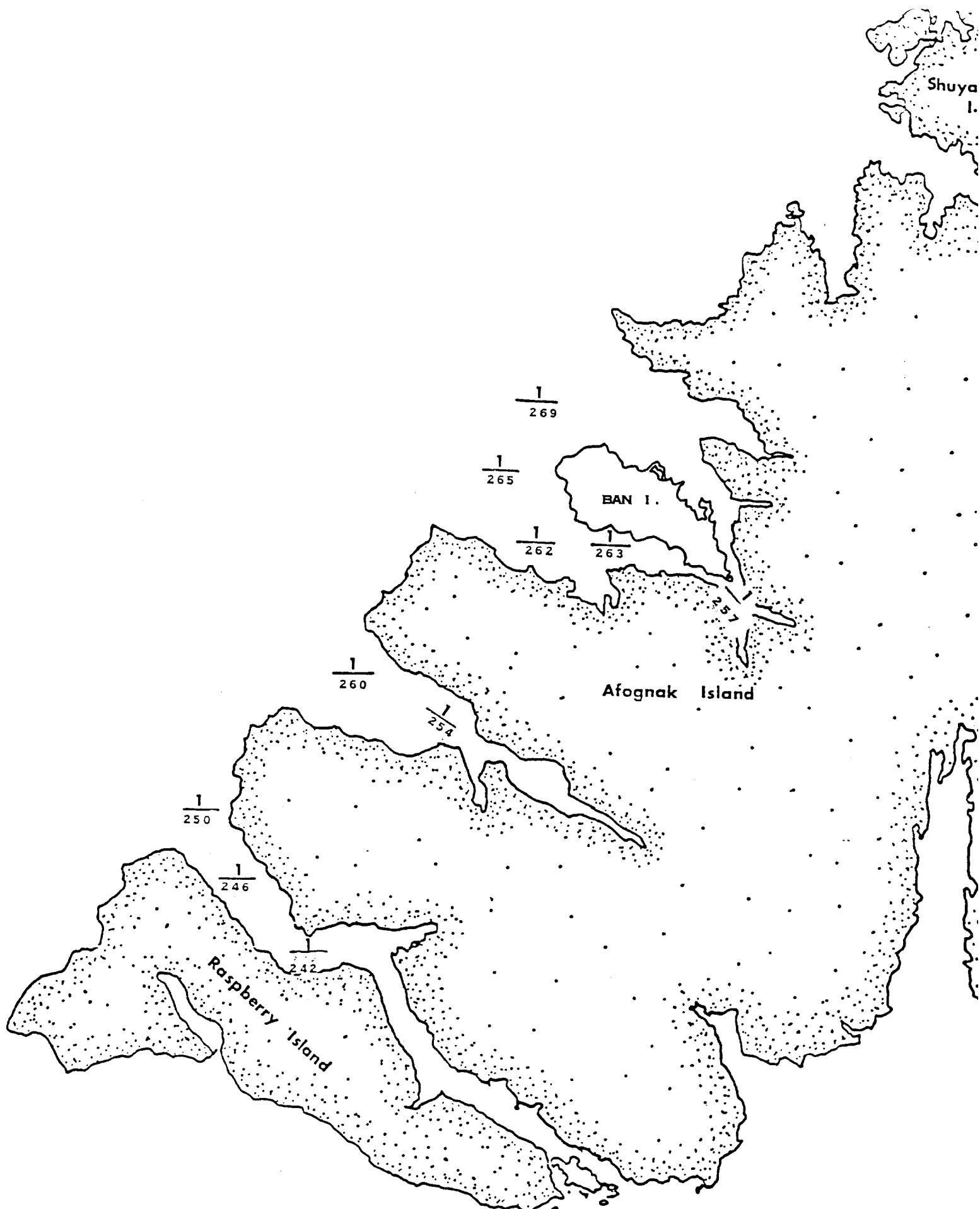


Figure 6j. Frequency of bay station research fishing at the West Side of Afognak Island, (1972-1985).

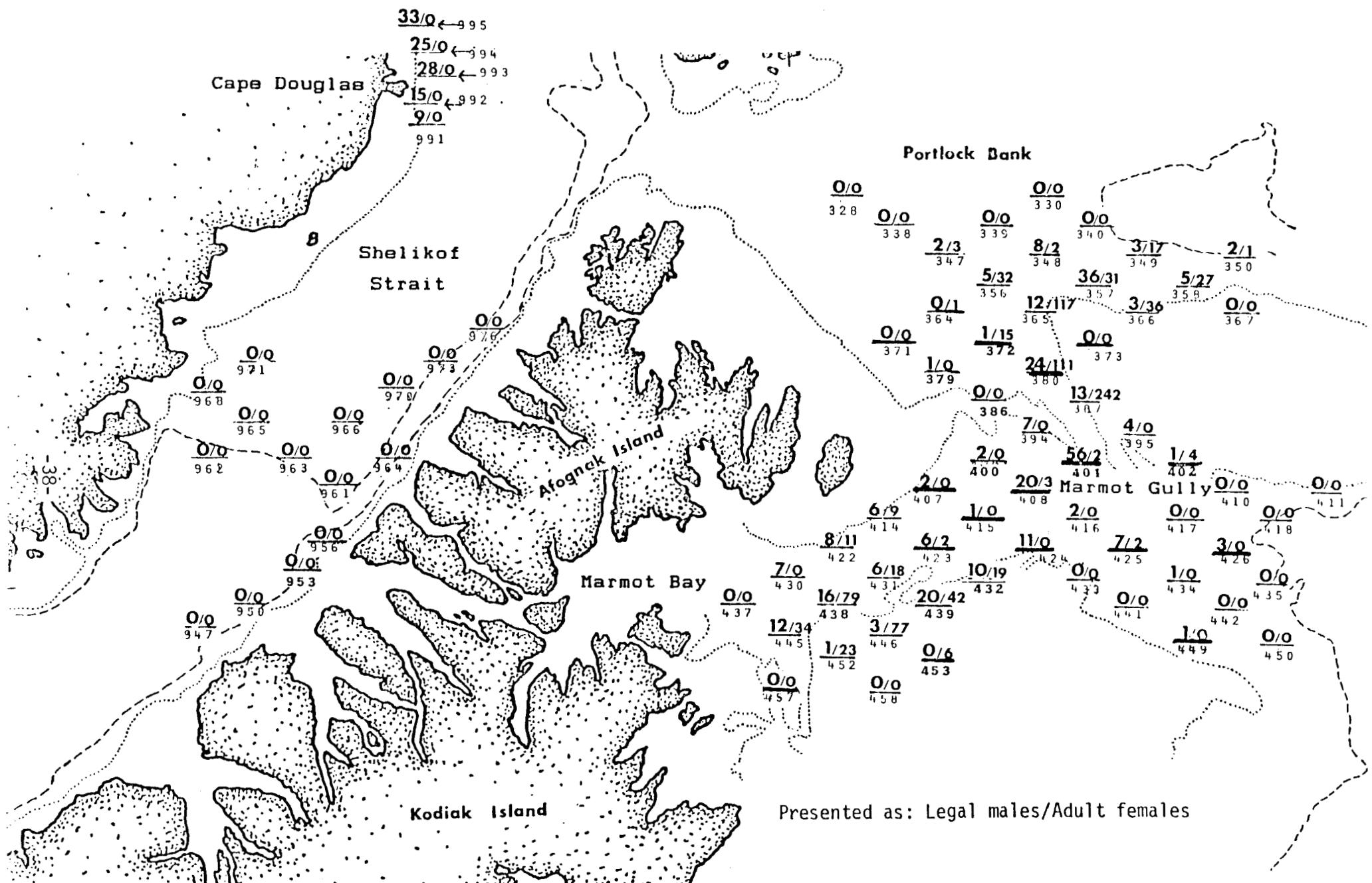


Figure 7a. Highest average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1972-1985).

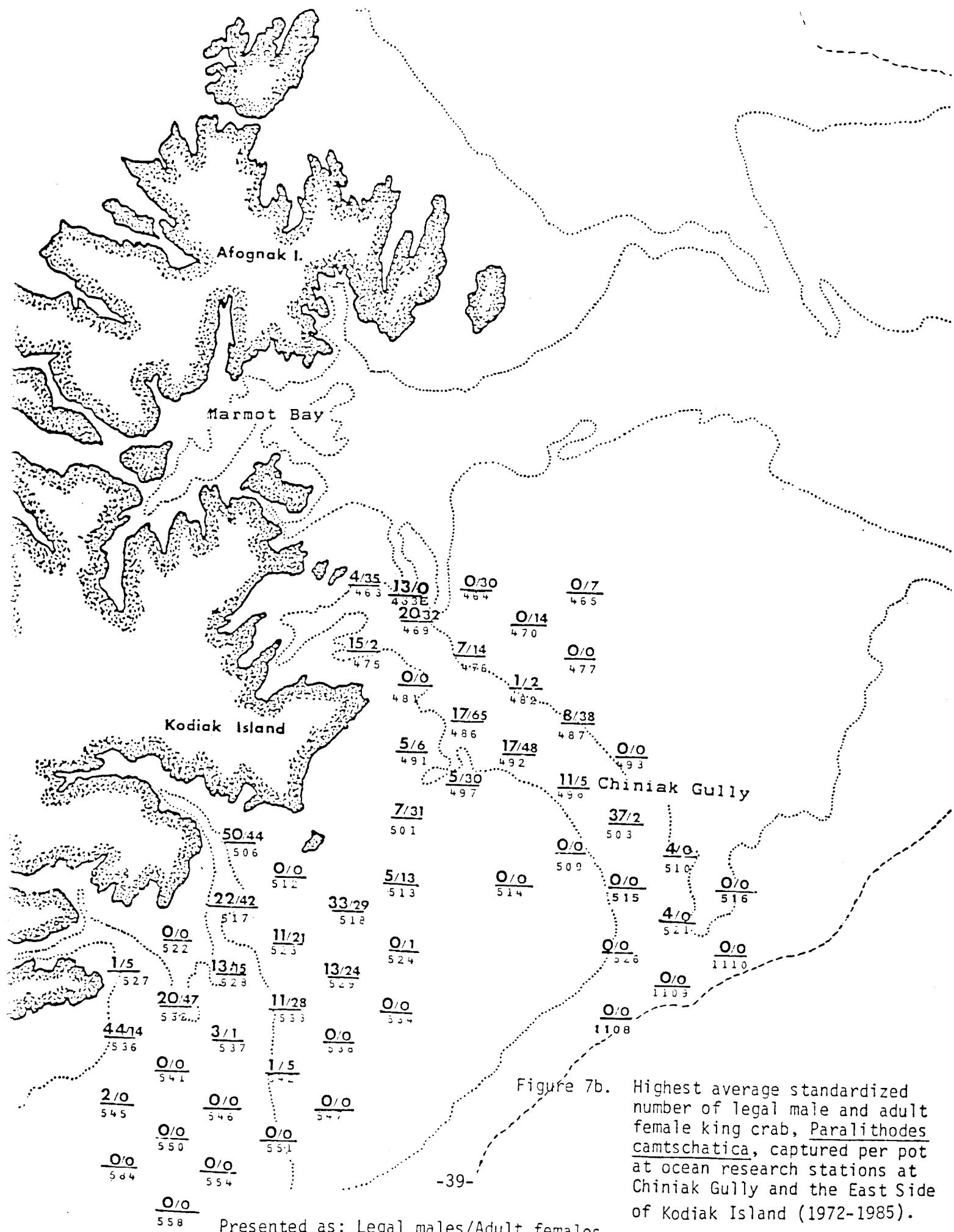
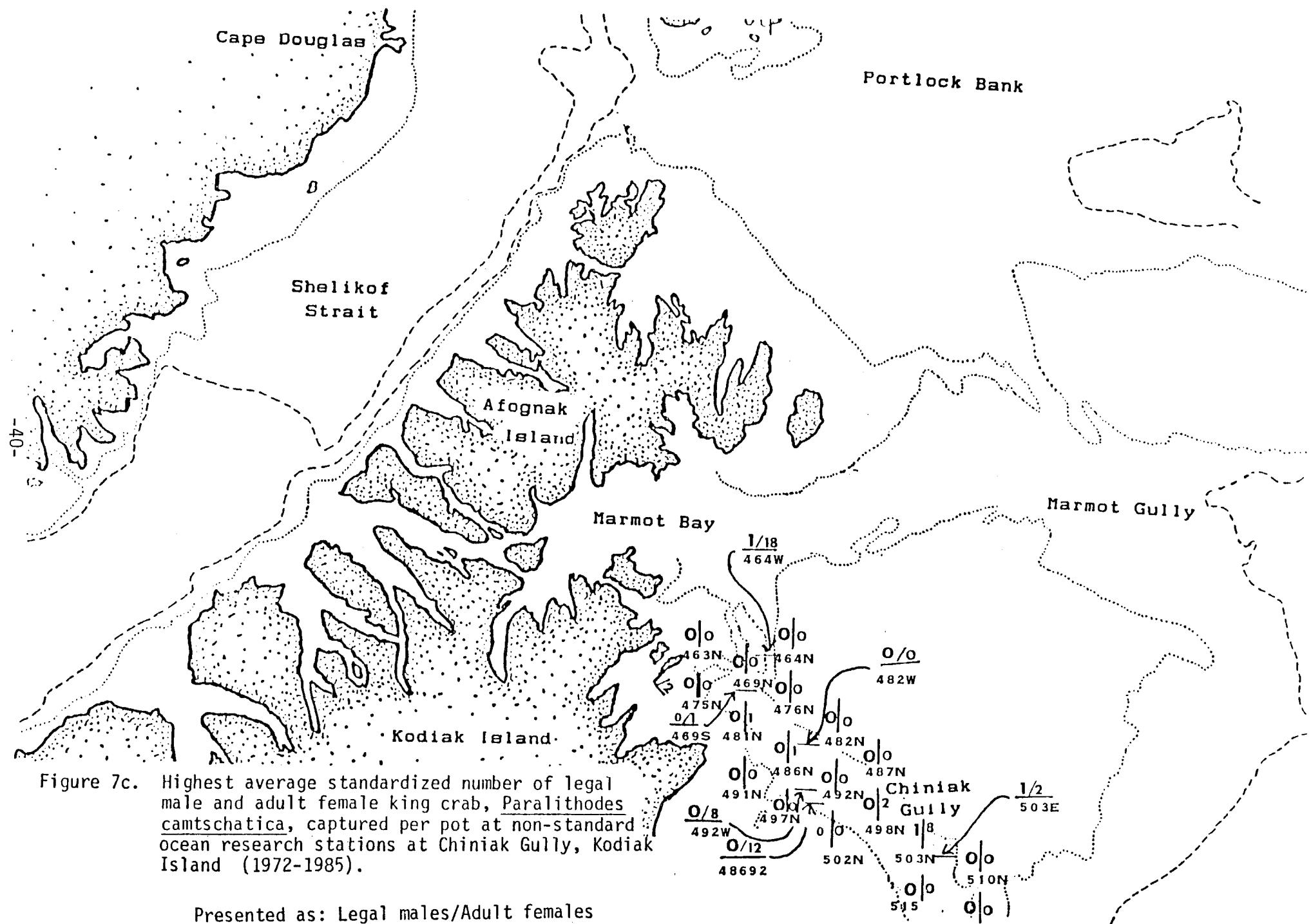


Figure 7b. Highest average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1972-1985).



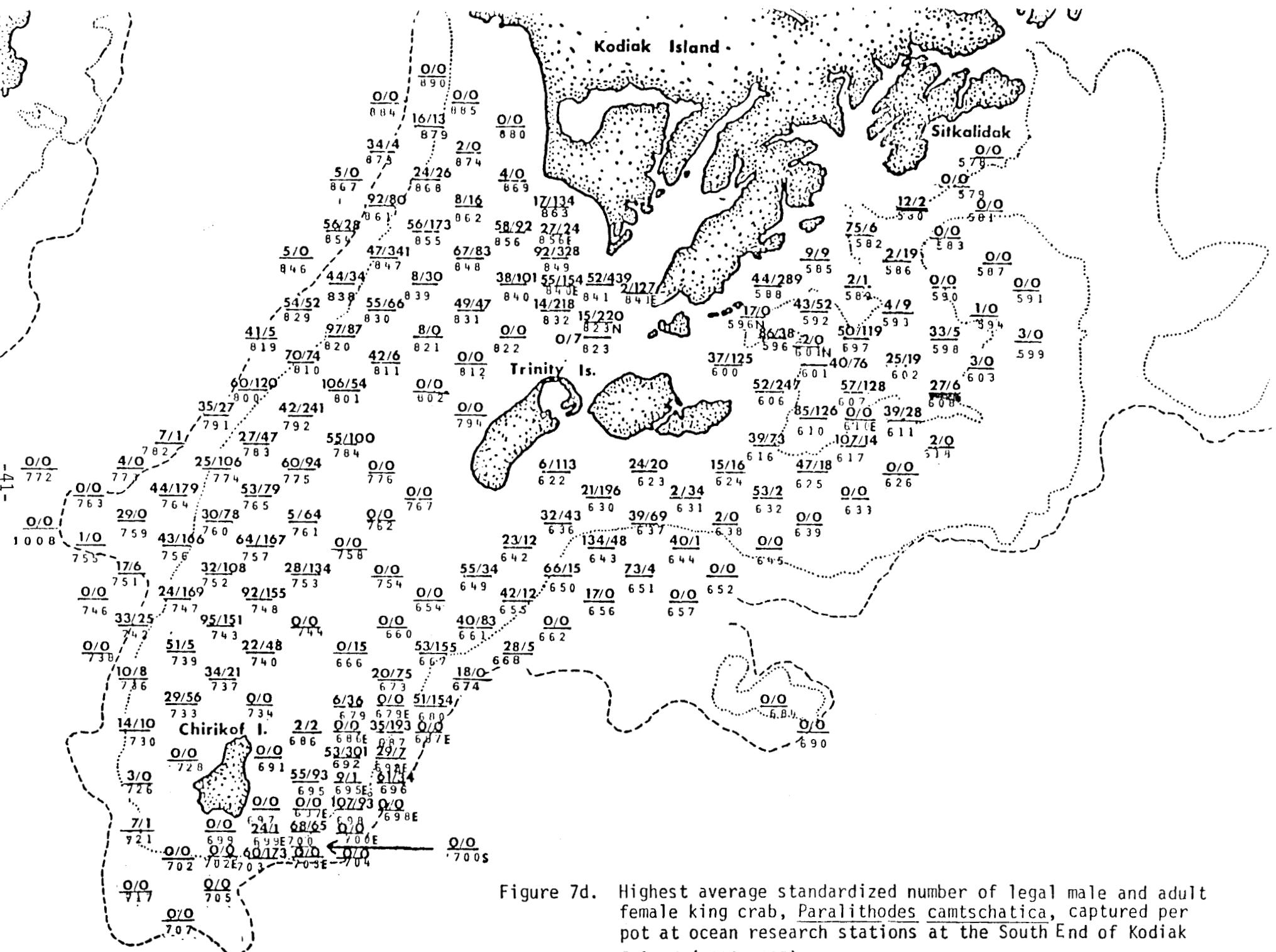


Figure 7d. Highest average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island (1972-1985).

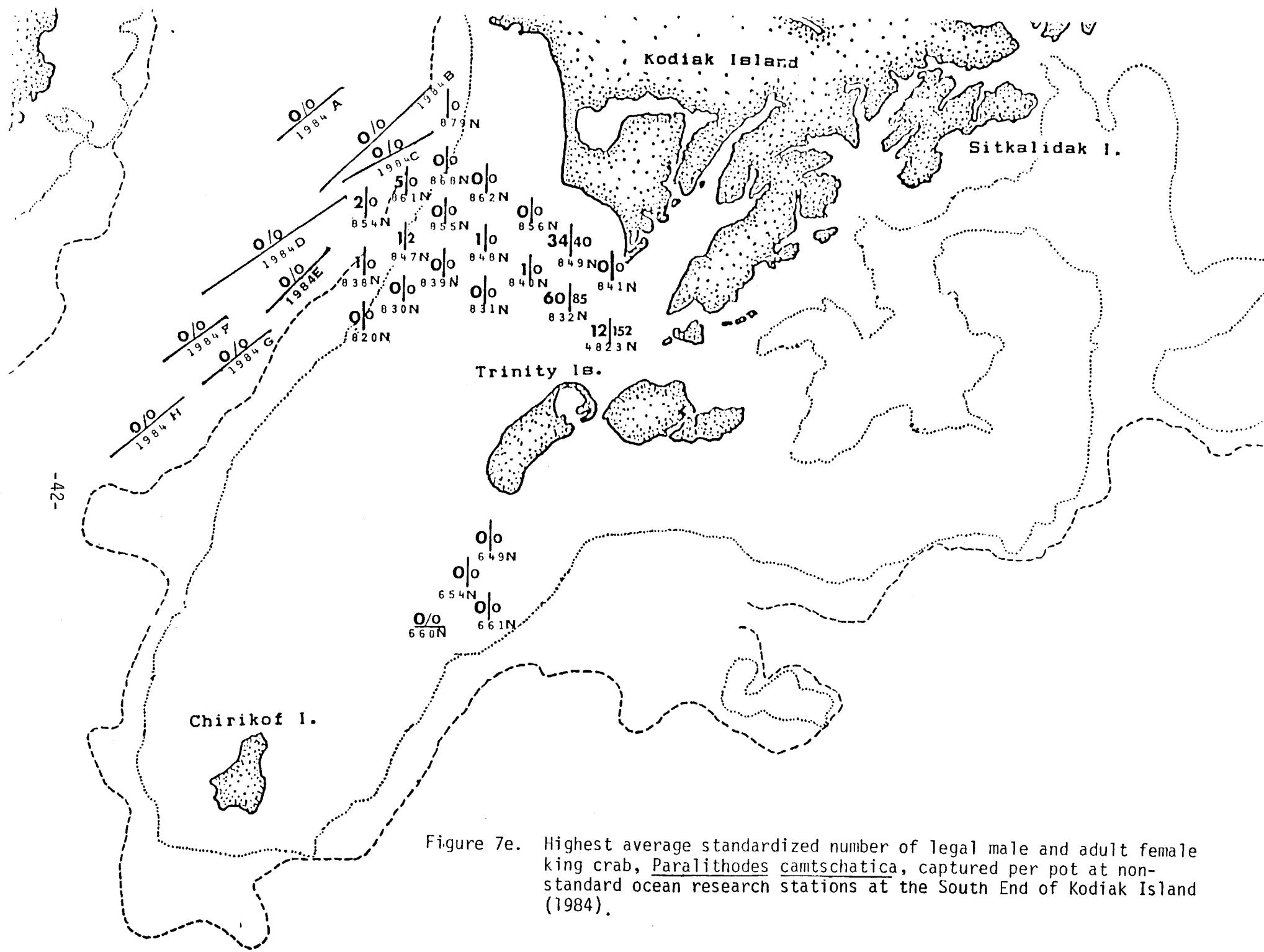
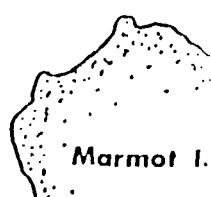
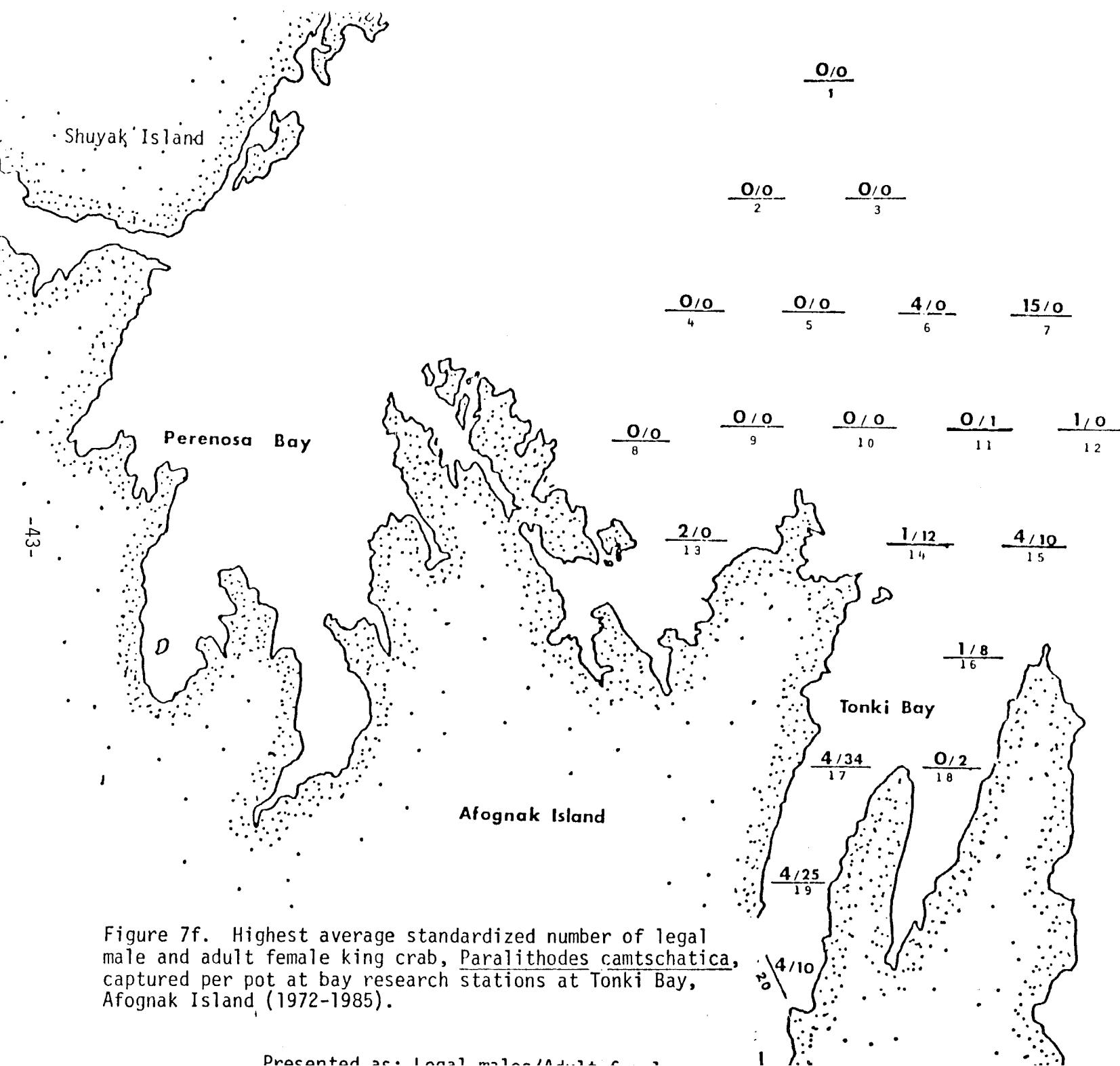


Figure 7e. Highest average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at non-standard ocean research stations at the South End of Kodiak Island (1984).



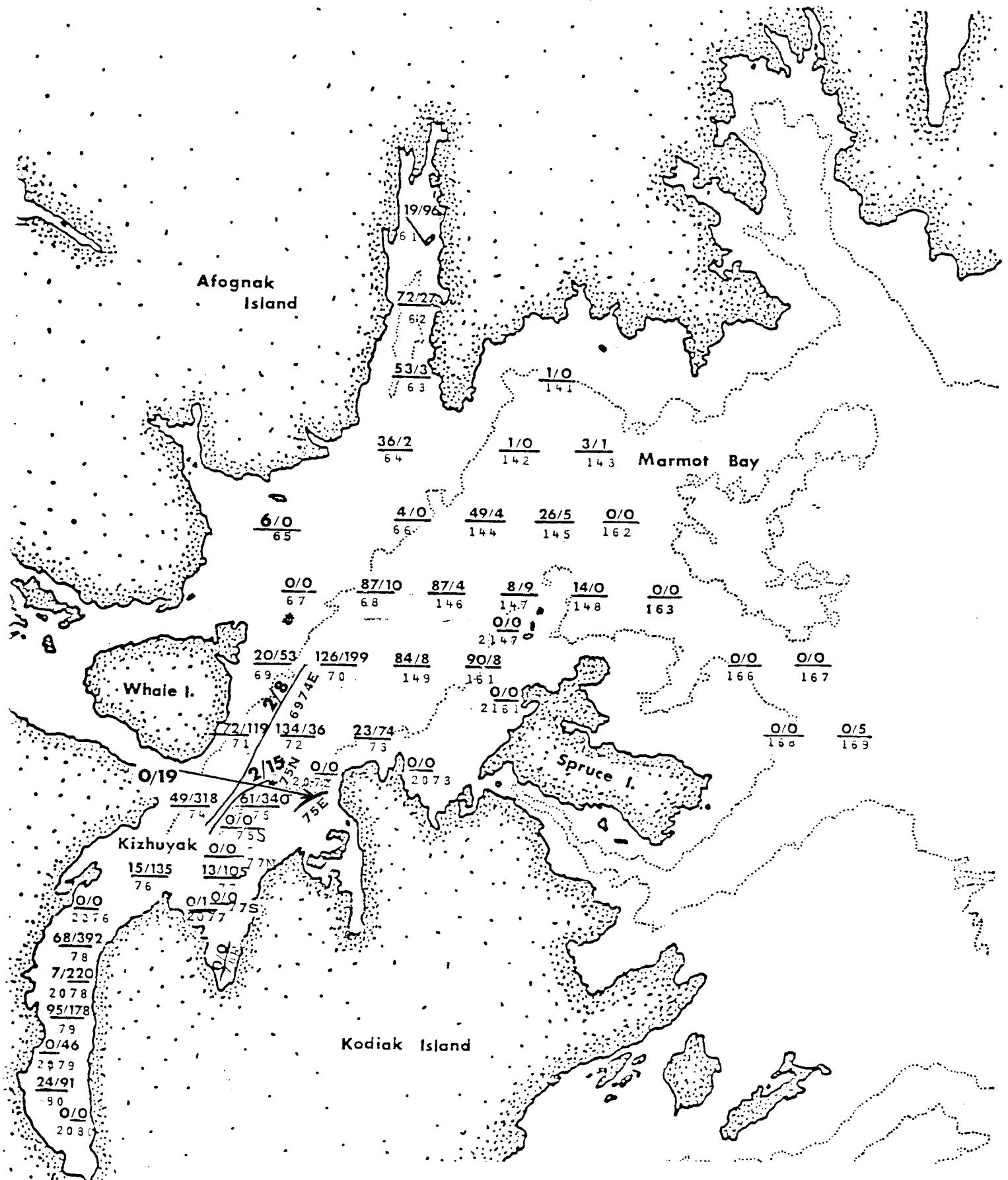


Figure 7g. Highest average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1972-1985).

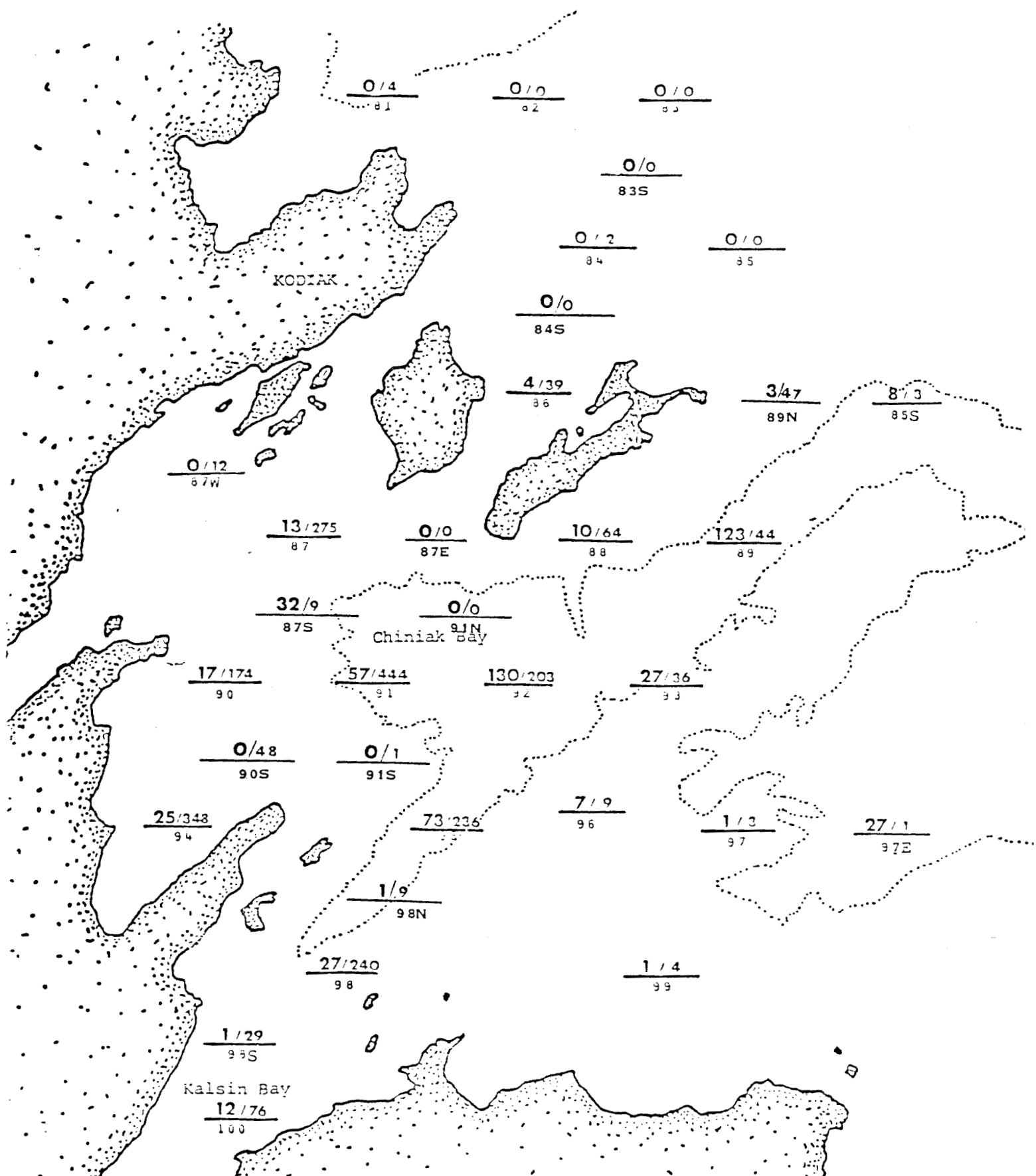


Figure 7h. Highest average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1972-1985).

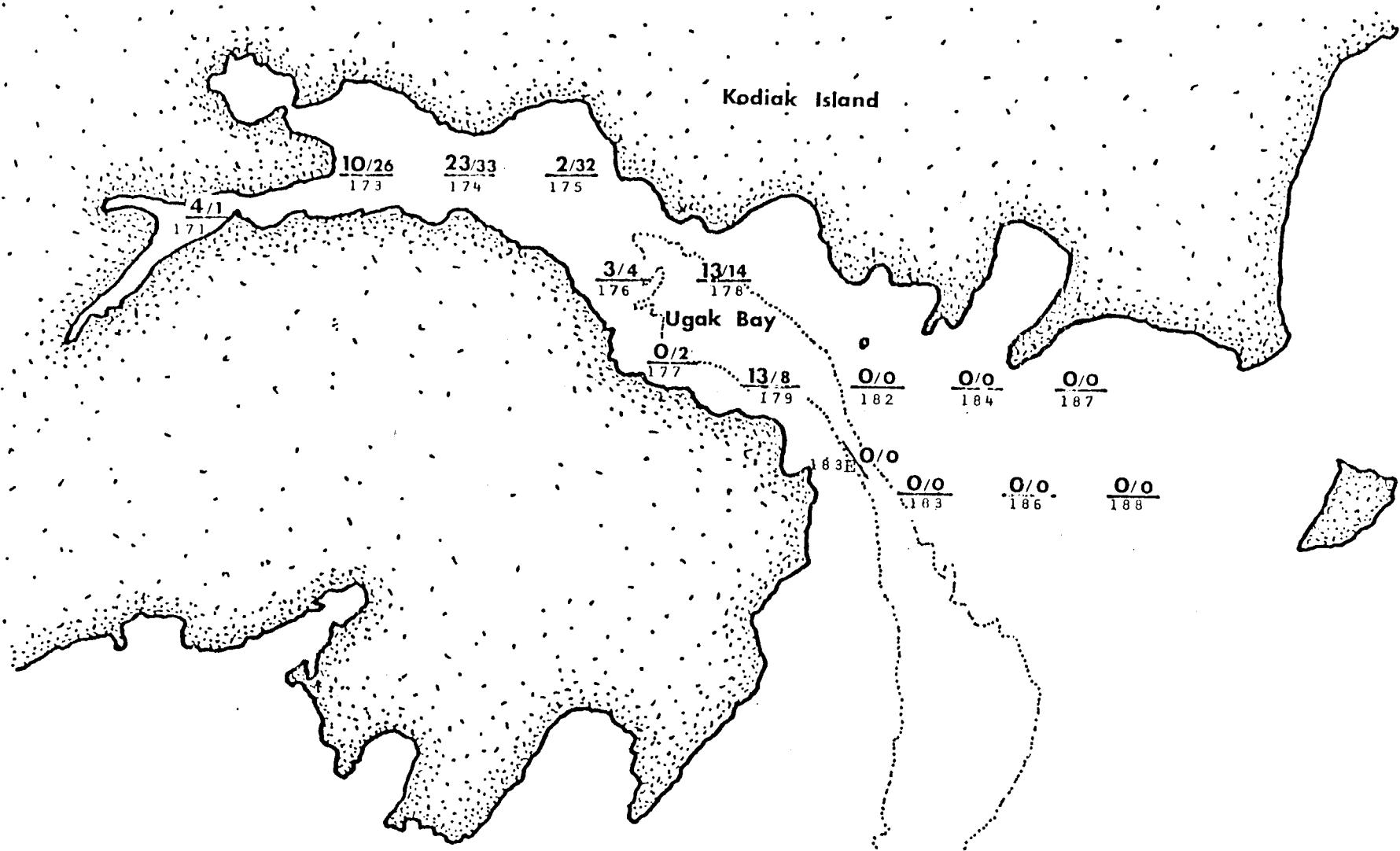


Figure 7i. Highest average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Ugak Bay, Kodiak Island (1972-1985).

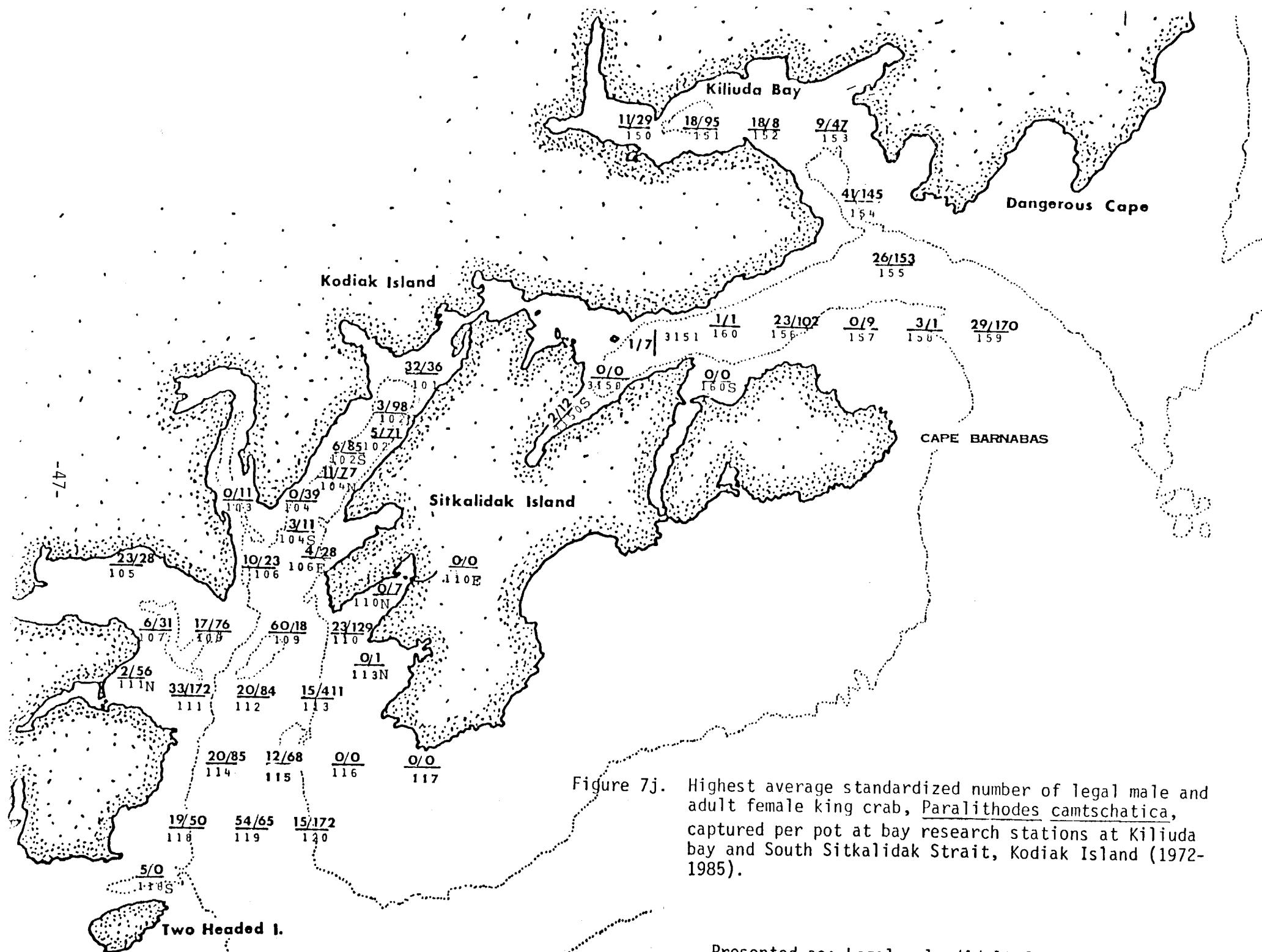


Figure 7j. Highest average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda bay and South Sitkalidak Strait, Kodiak Island (1972-1985).

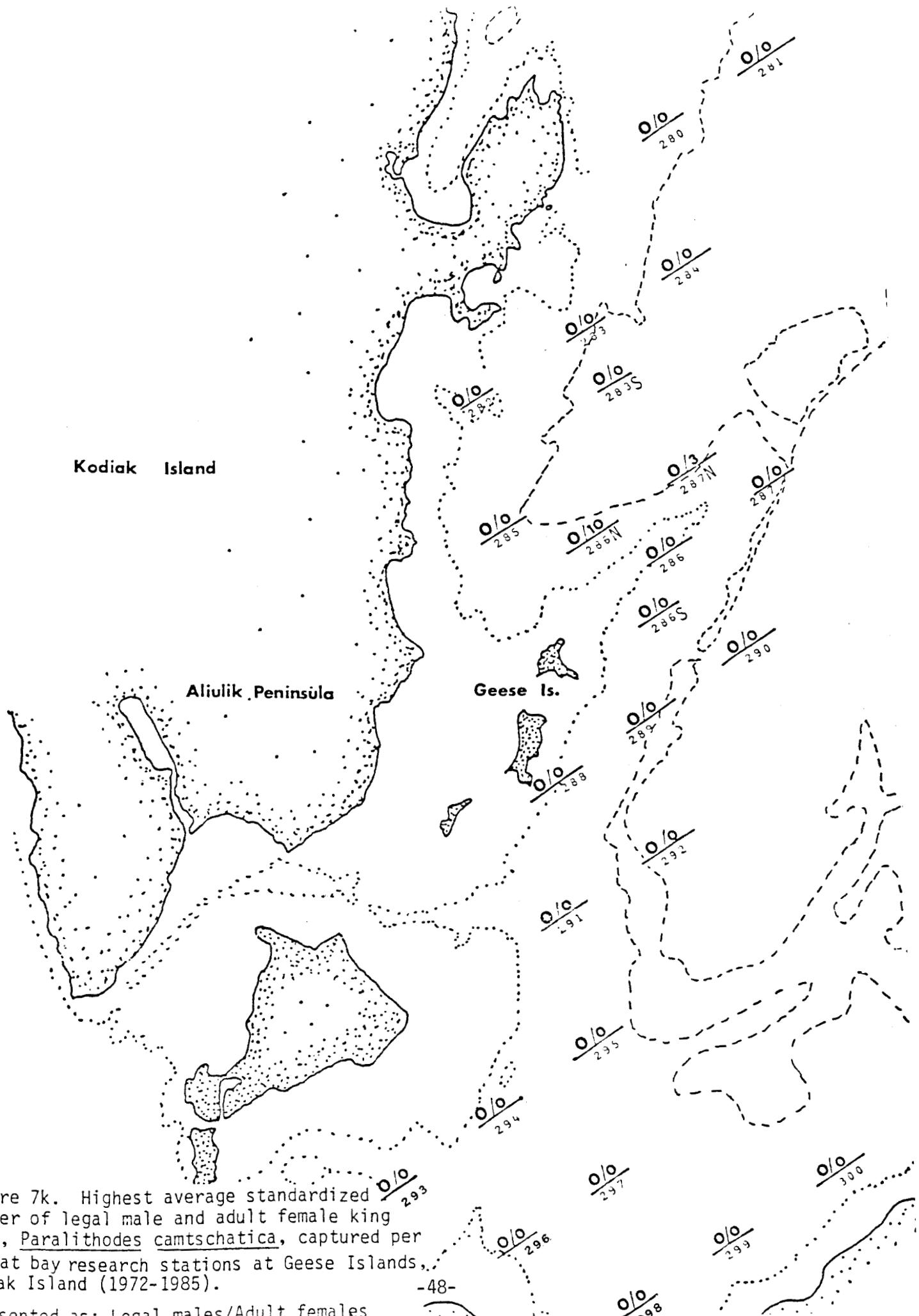


Figure 7k. Highest average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Geese Islands, Kodiak Island (1972-1985).

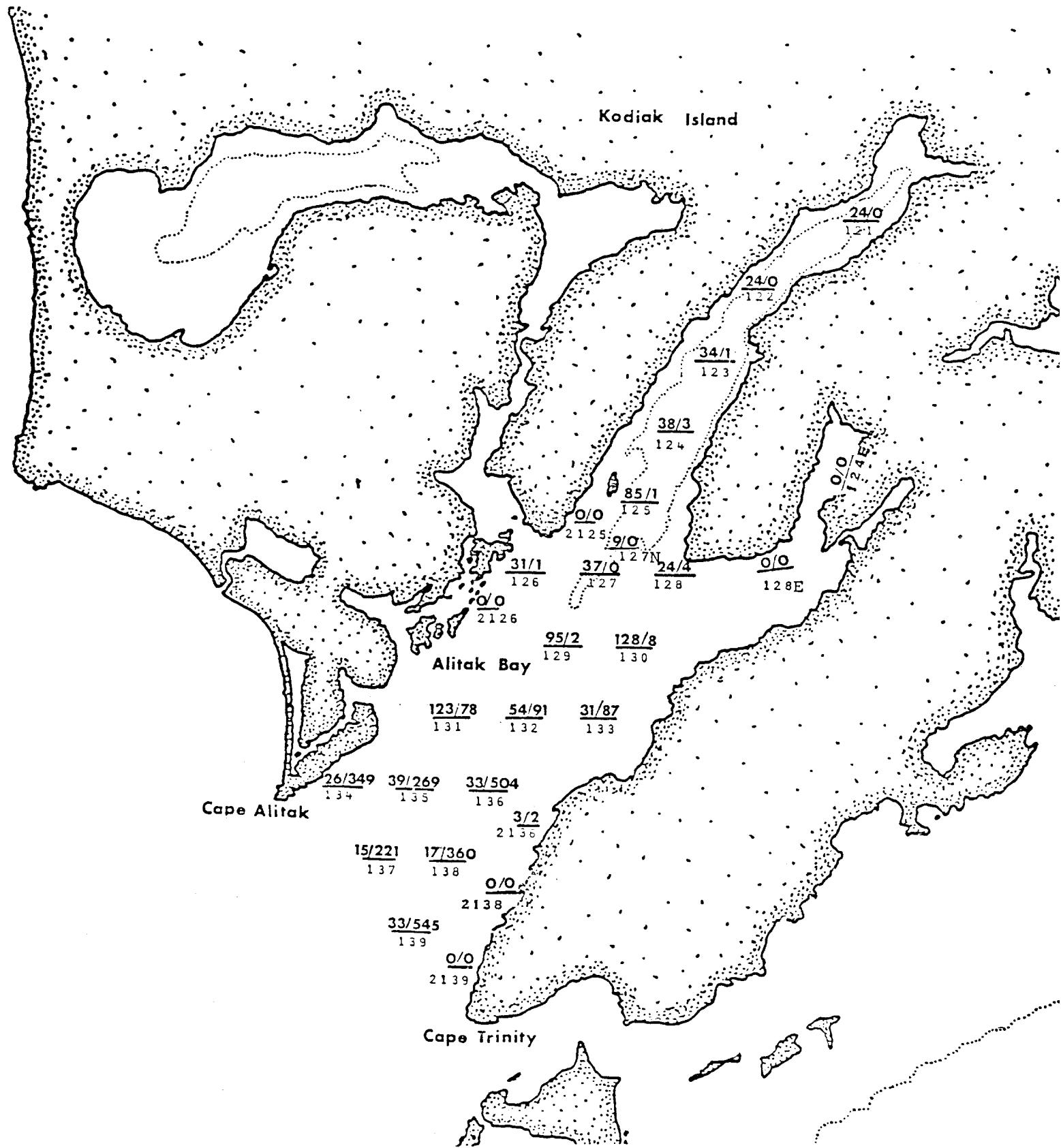


Figure 7L. Highest average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1972-1985).

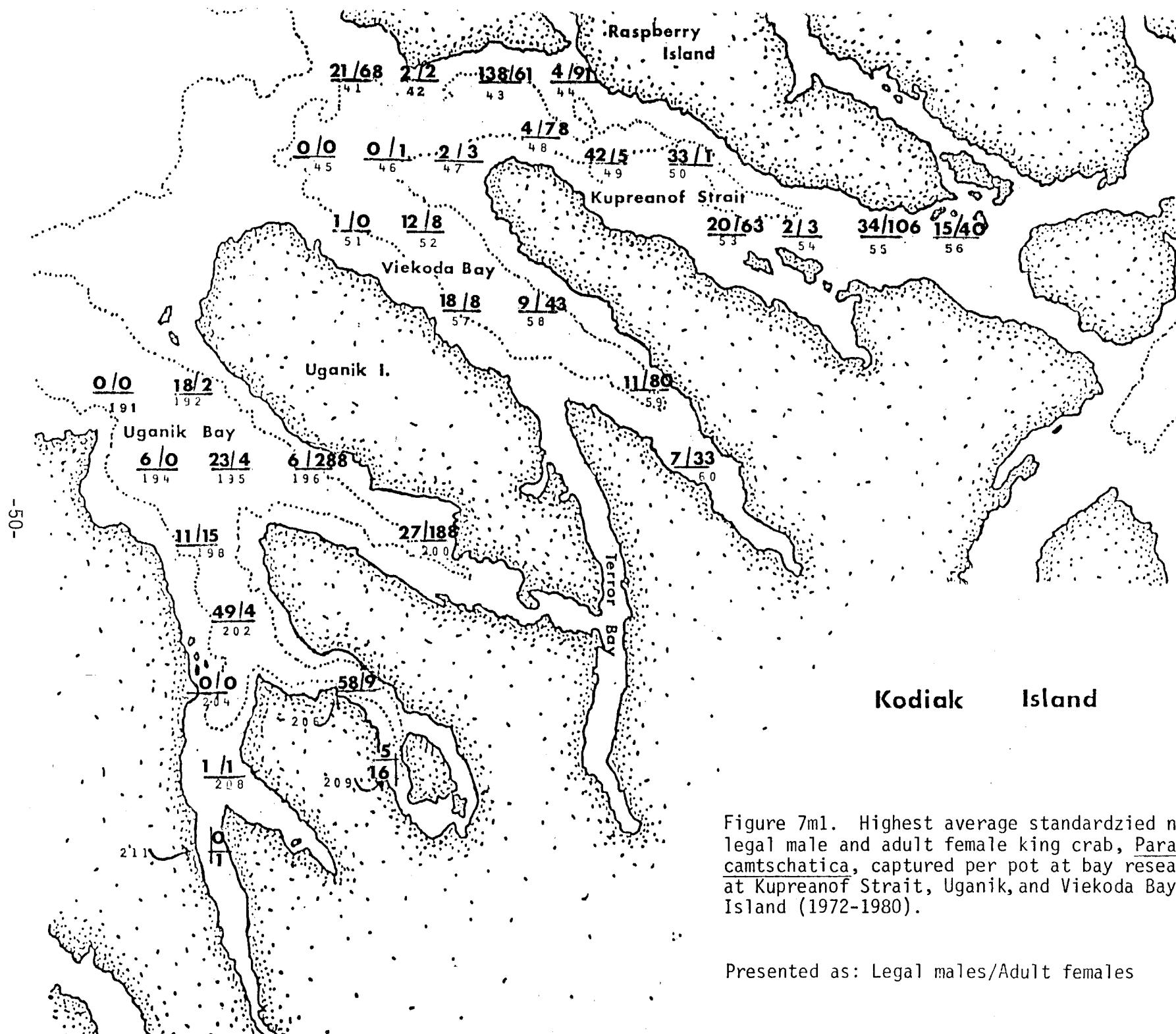


Figure 7m1. Highest average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kupreanof Strait, Uganik, and Viekoda Bays; Kodiak Island (1972-1980).

Presented as: Legal males/Adult females

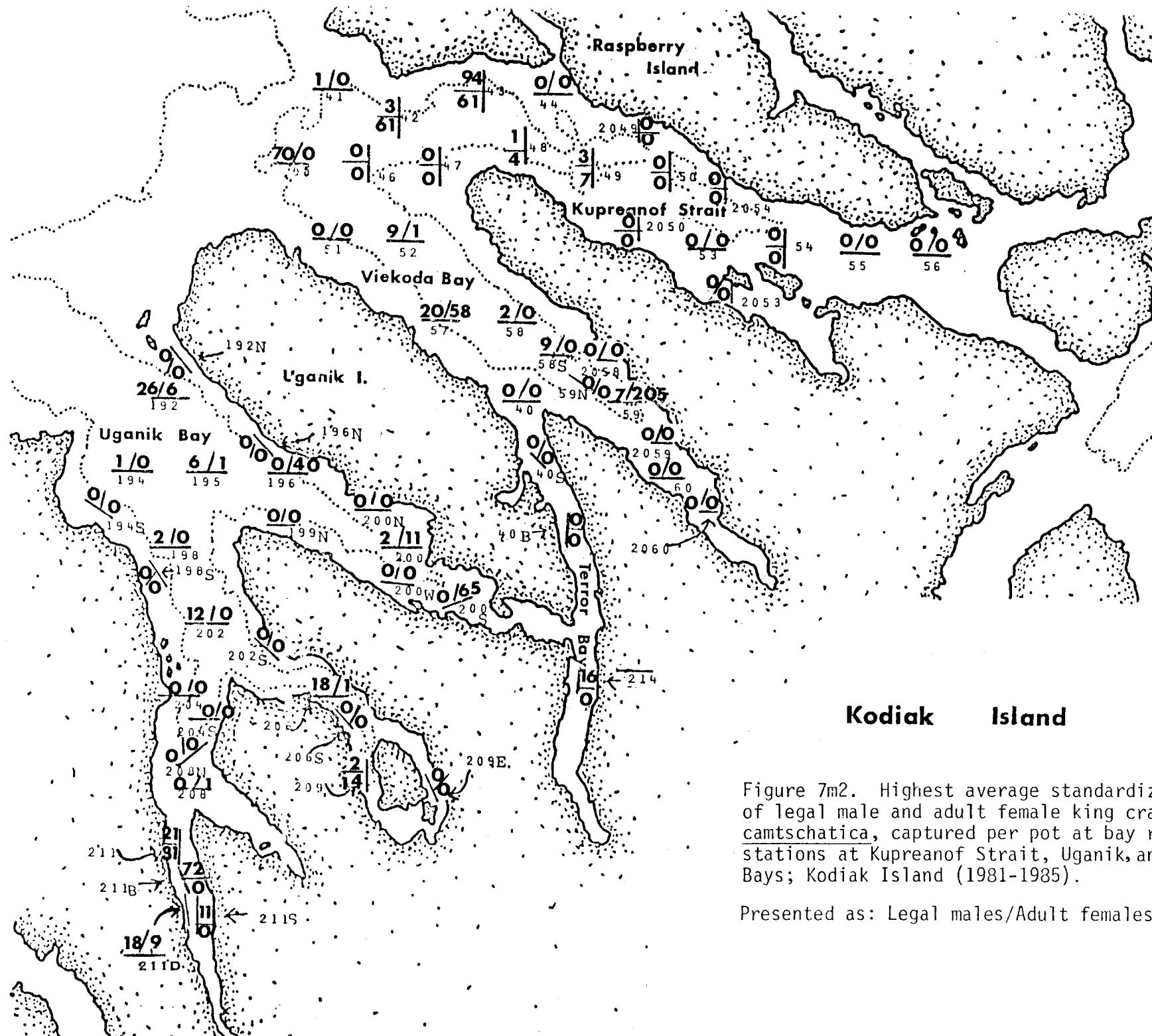


Figure 7m2. Highest average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kupreanof Strait, Uganik, and Viekoda Bays; Kodiak Island (1981-1985).

Presented as: Legal males/Adult females

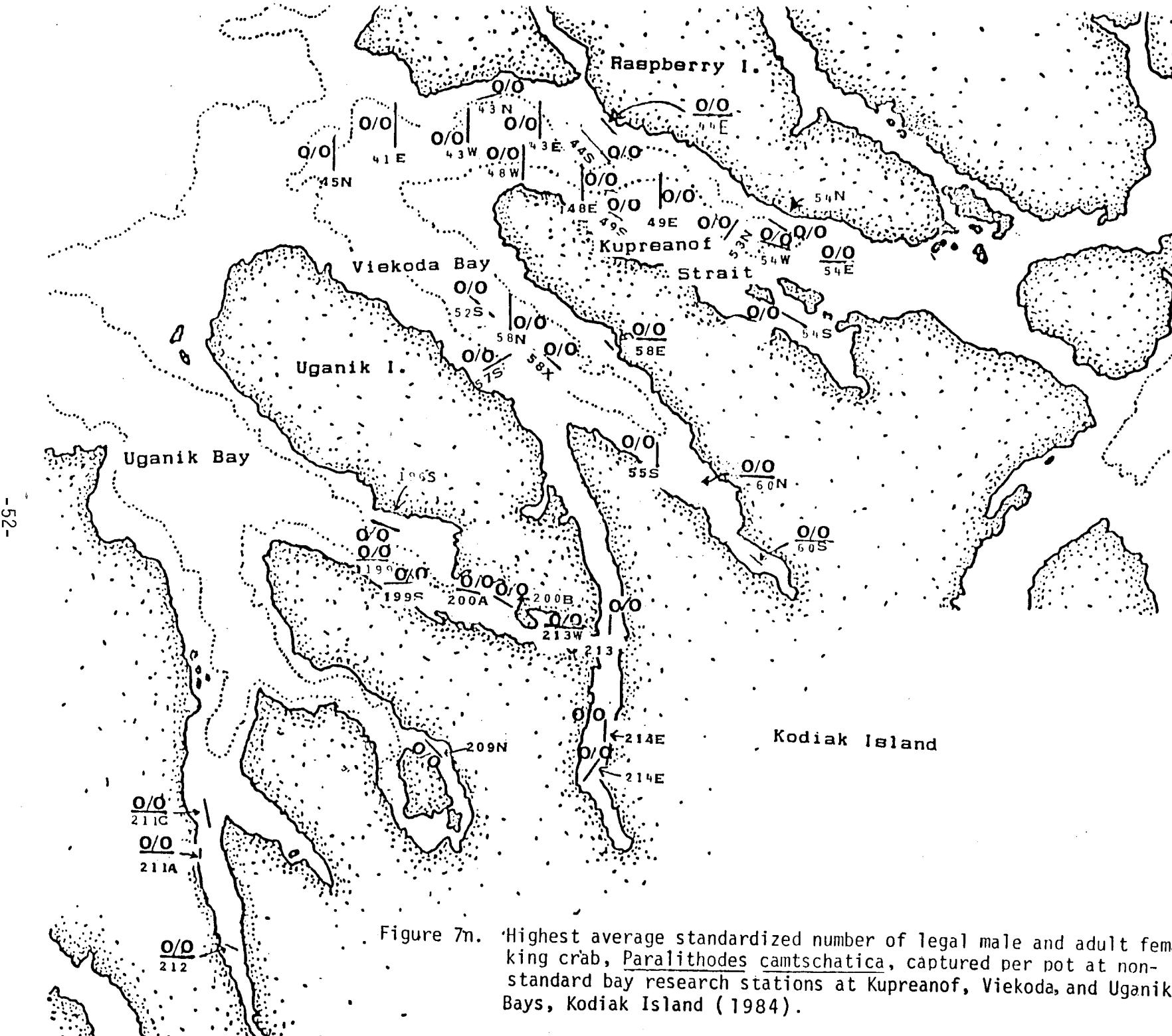


Figure 7n. Highest average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at non-standard bay research stations at Kupreanof, Viekoda, and Uganik Bays, Kodiak Island (1984).

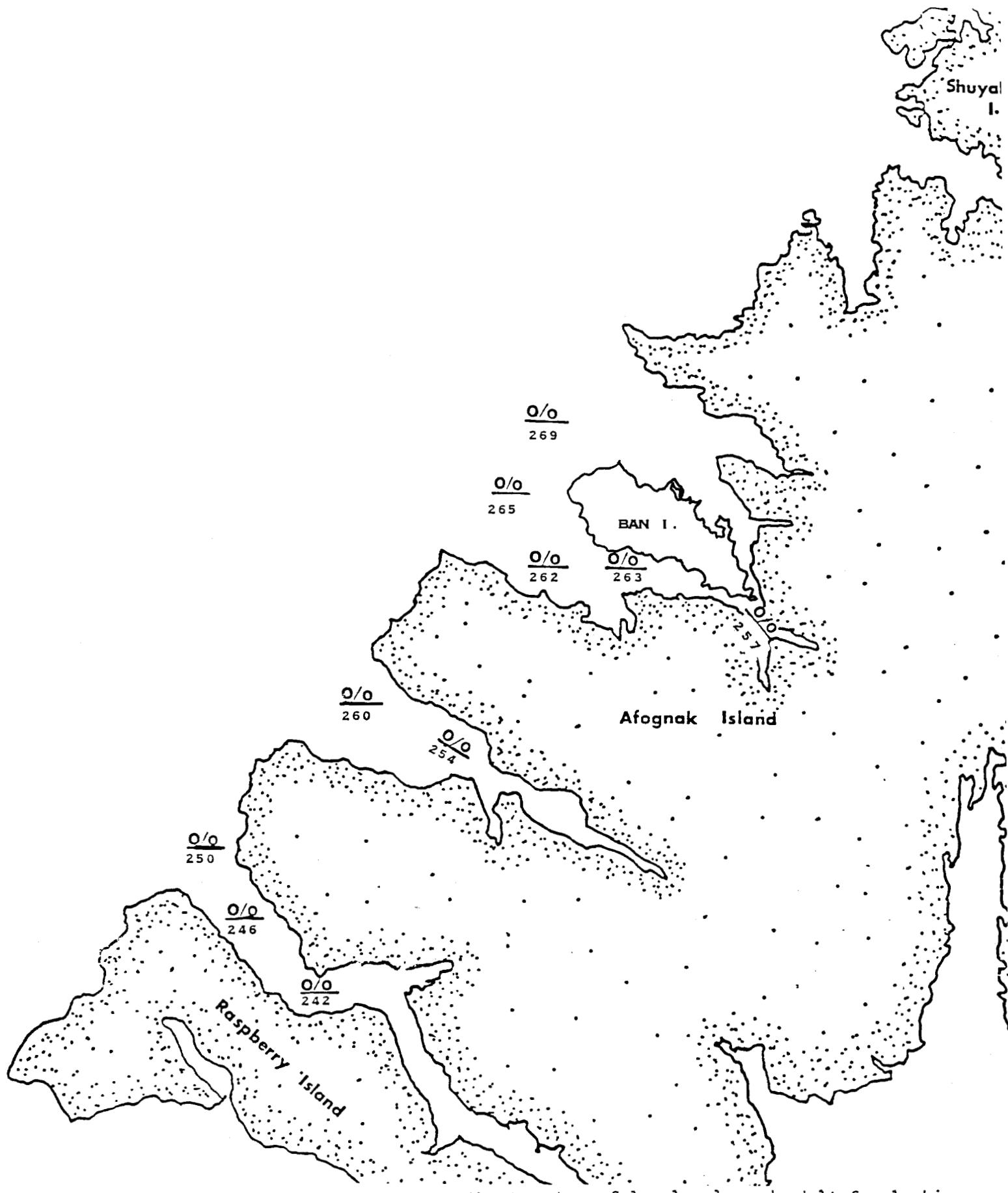


Figure 7o. Highest average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at the West side of Afognak Island (1972-1985).

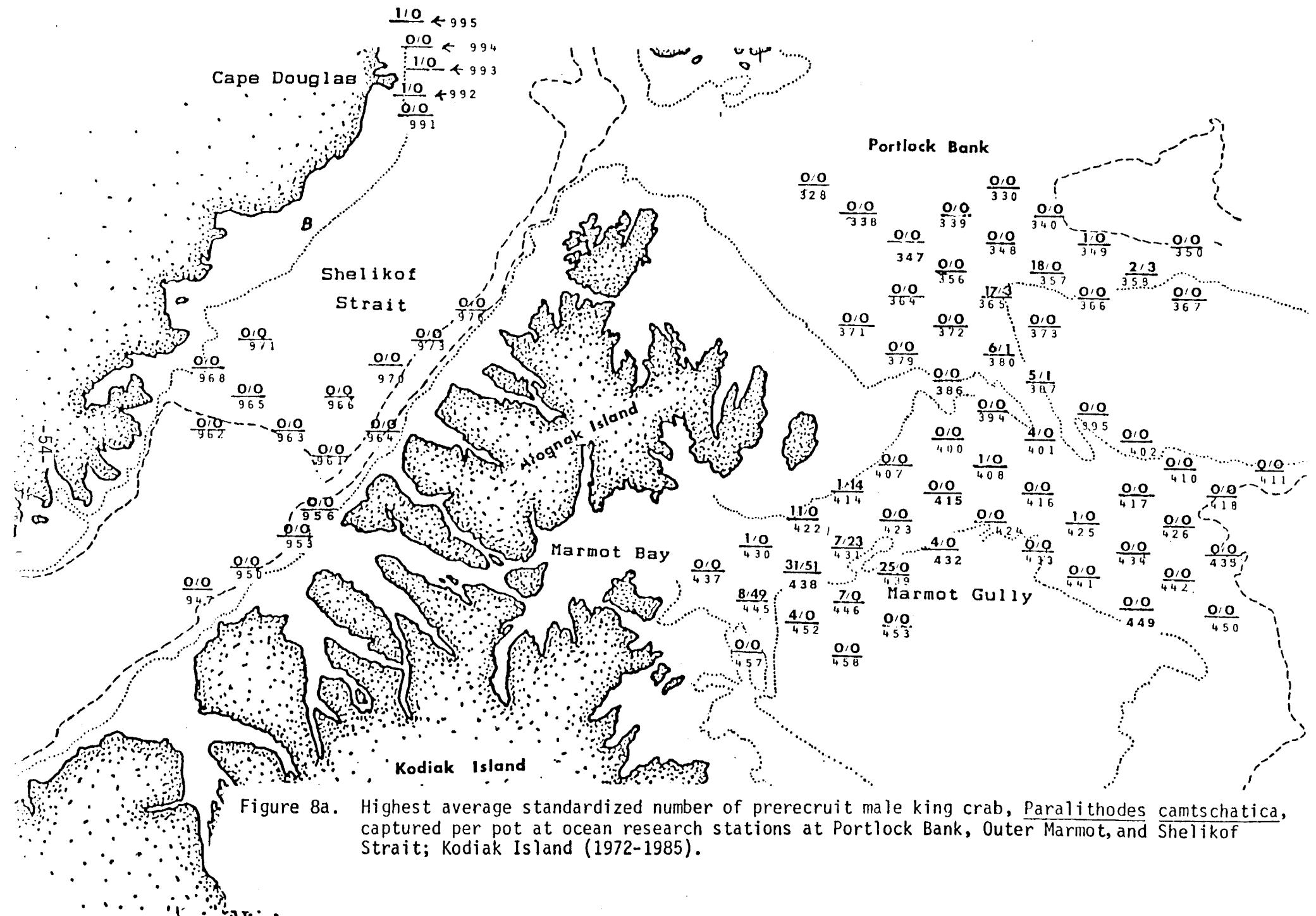


Figure 8a. Highest average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1972-1985).

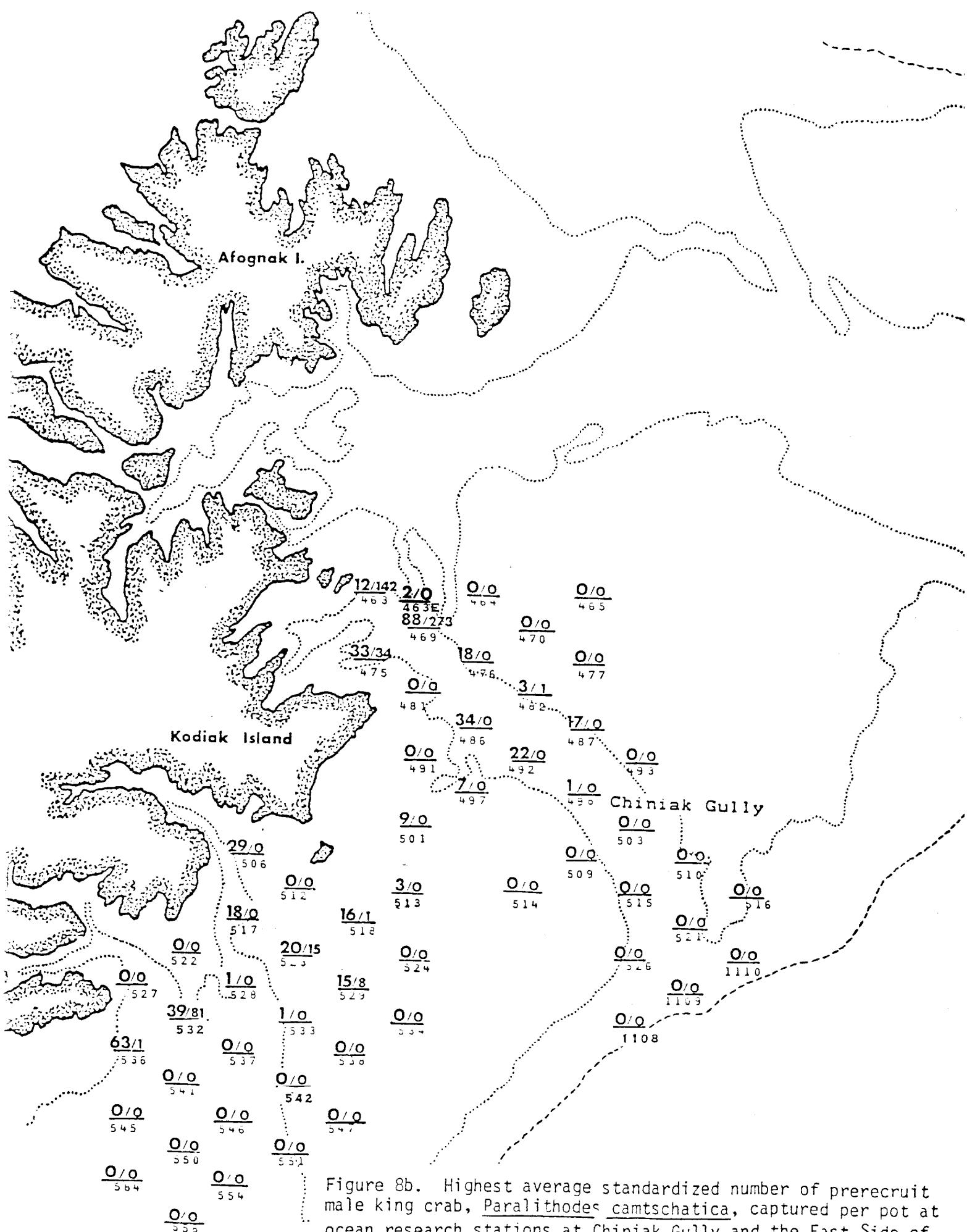


Figure 8b. Highest average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1972-1985).

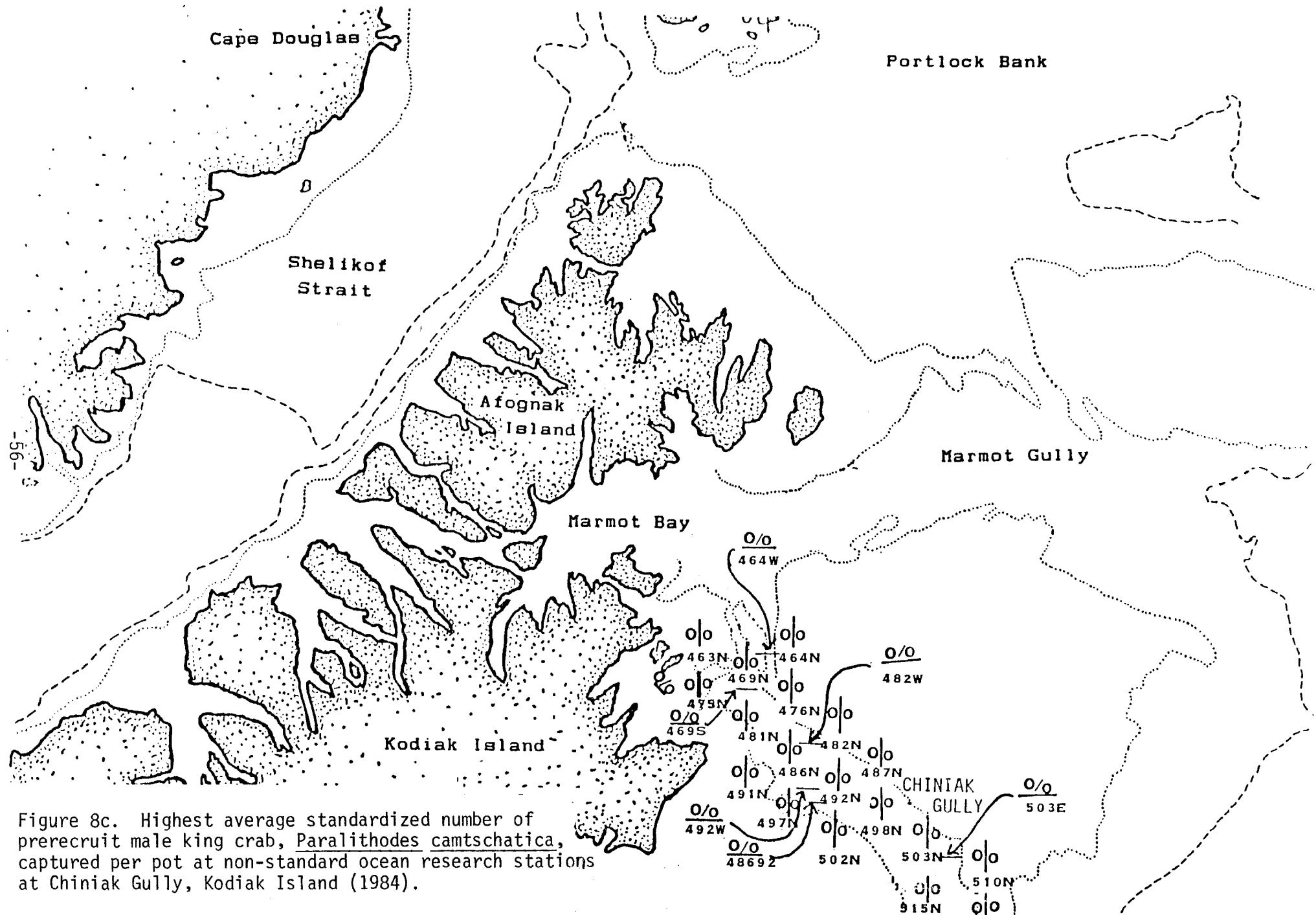


Figure 8c. Highest average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at non-standard ocean research stations at Chiniak Gully, Kodiak Island (1984).

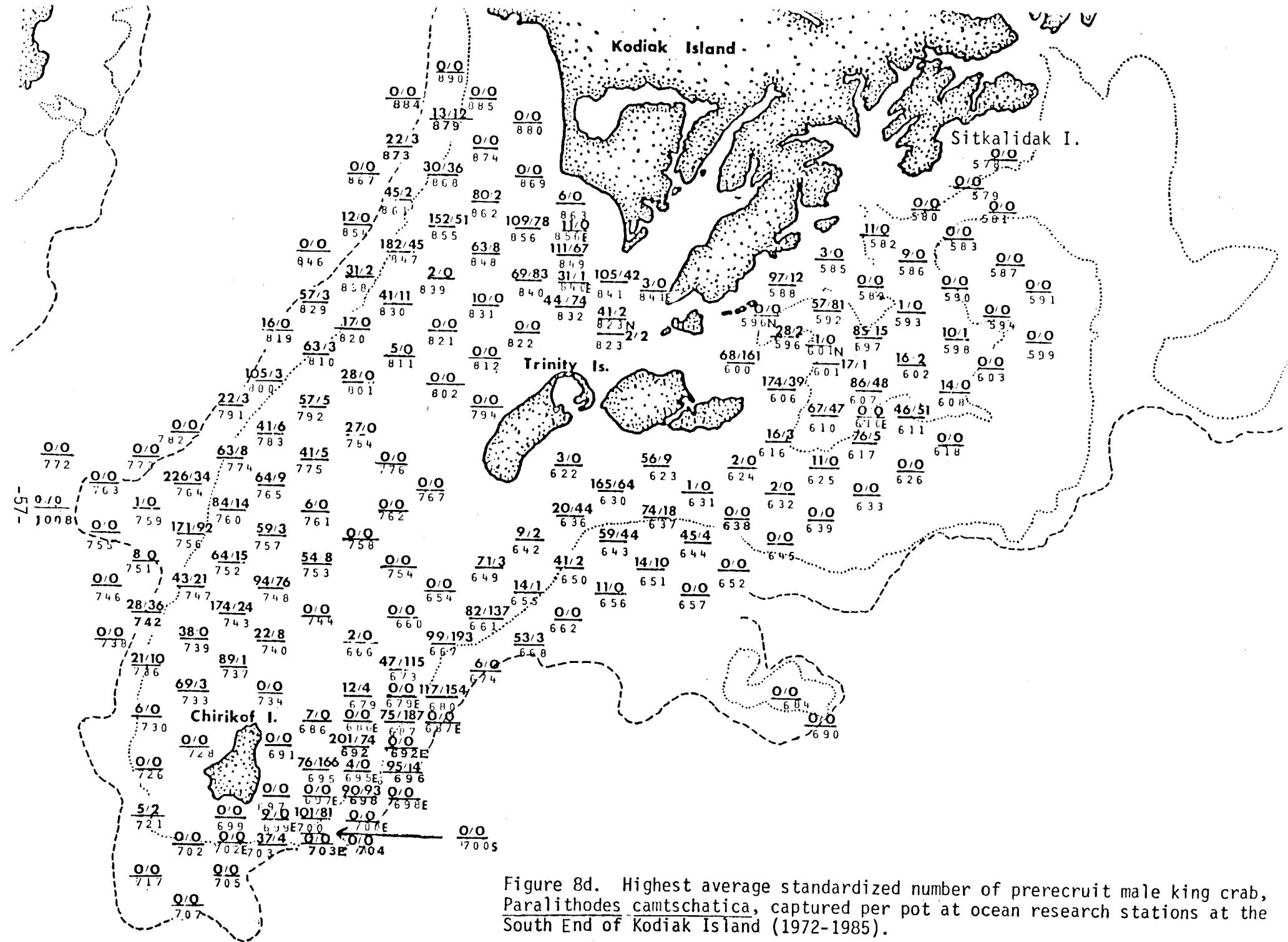


Figure 8d. Highest average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island (1972-1985).

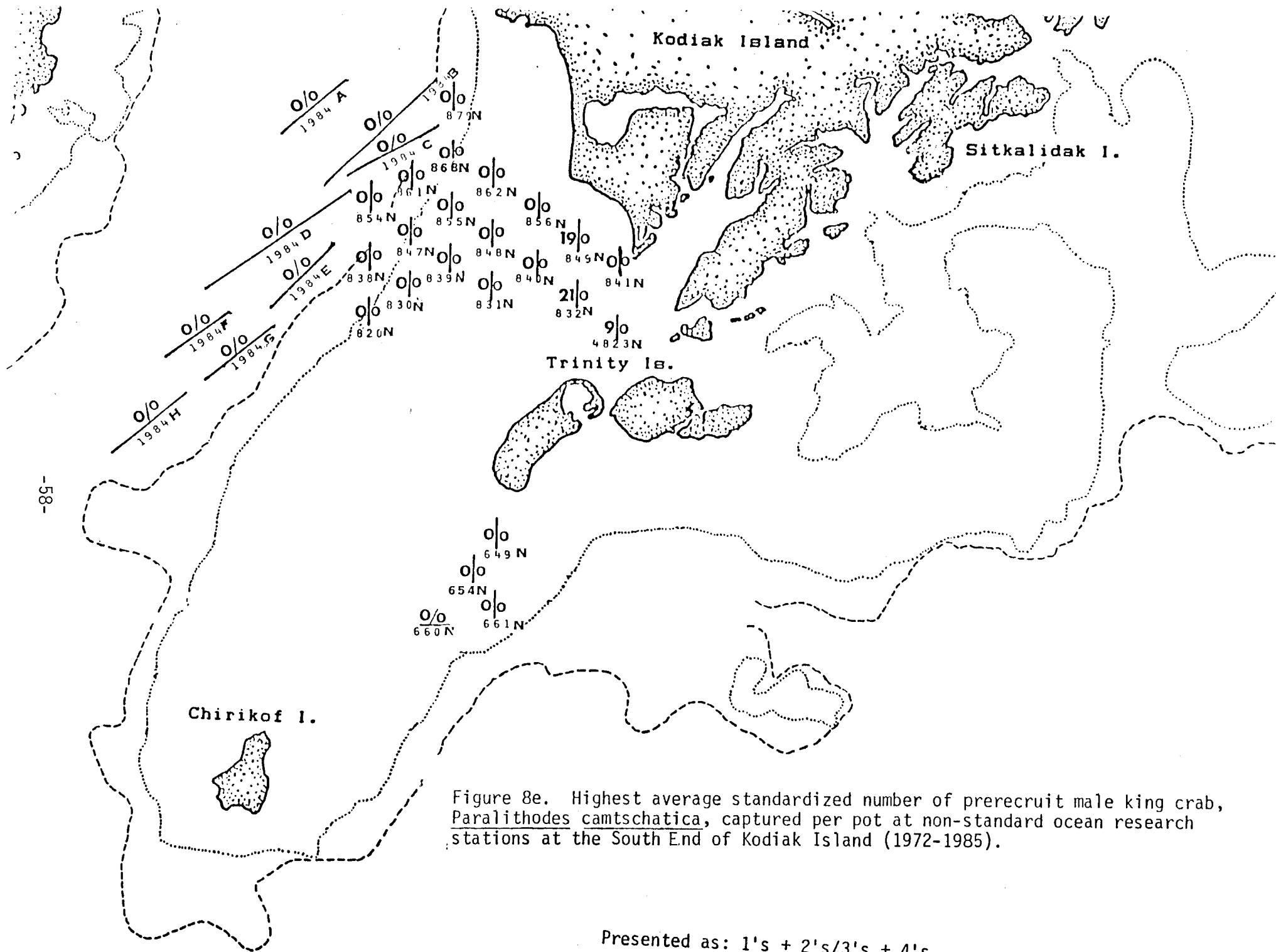


Figure 8e. Highest average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at non-standard ocean research stations at the South End of Kodiak Island (1972-1985).

Presented as: 1's + 2's/3's + 4's

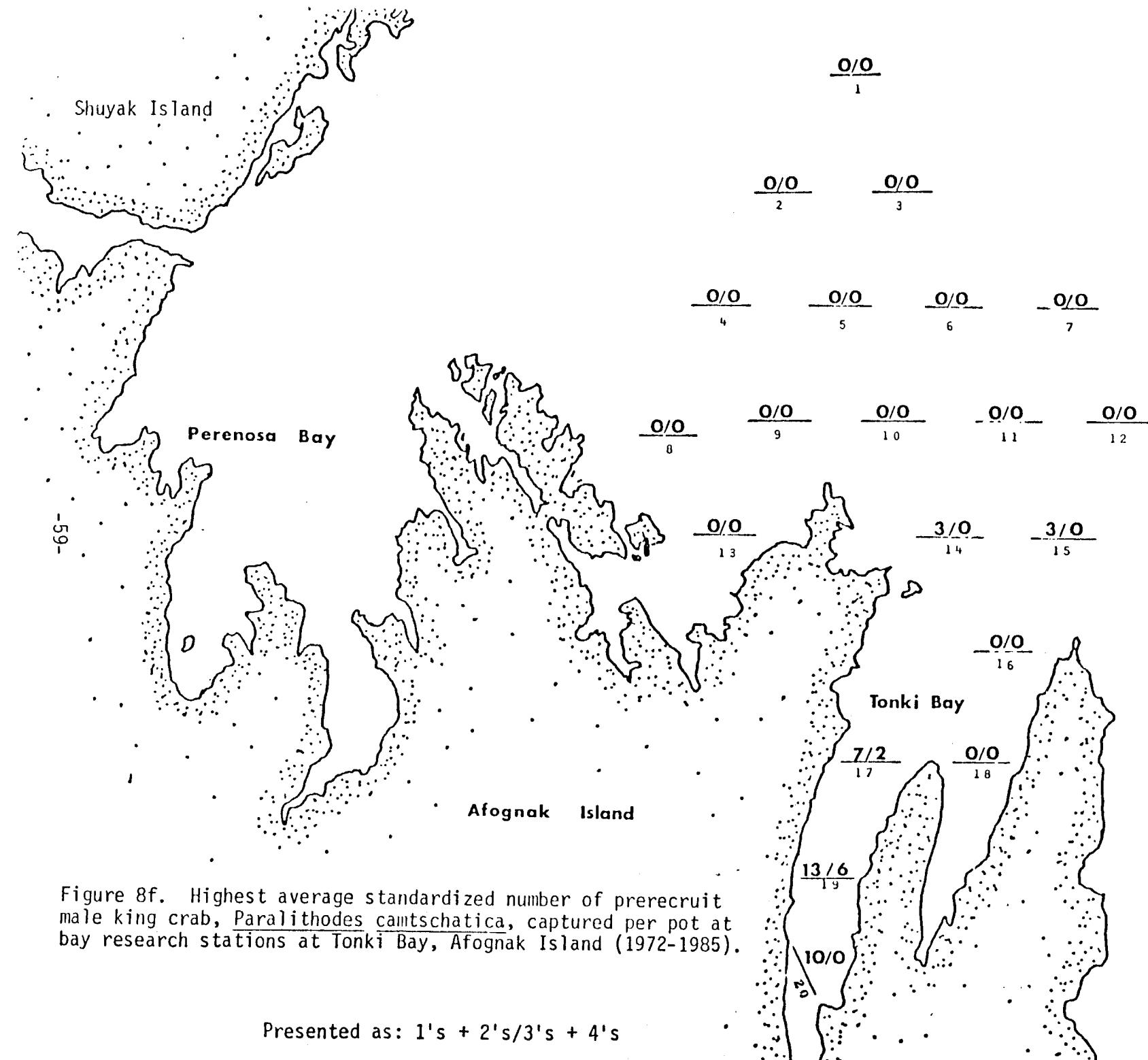


Figure 8f. Highest average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Tonki Bay, Afognak Island (1972-1985).

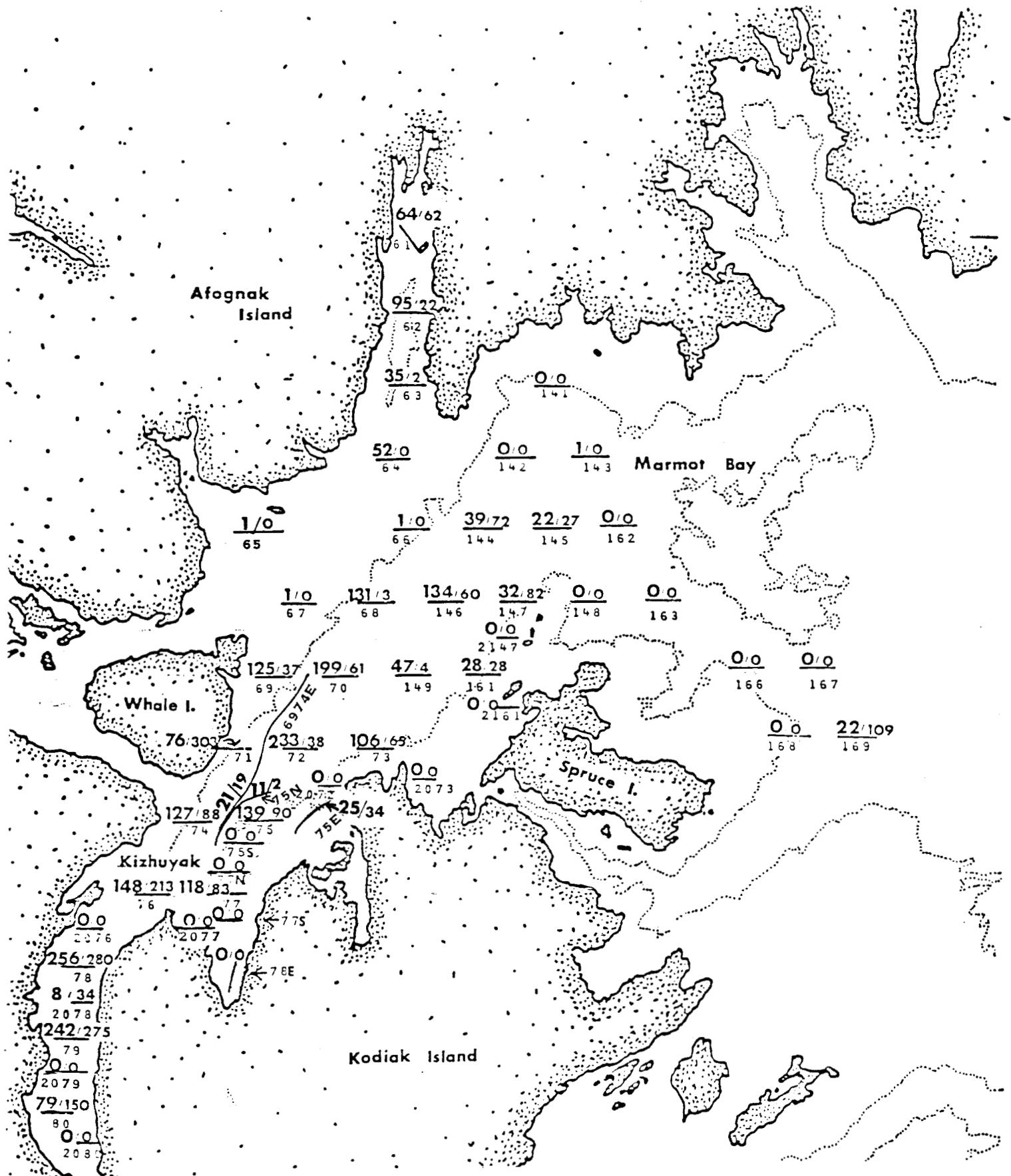


Figure 8g. Highest average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1972-1985).

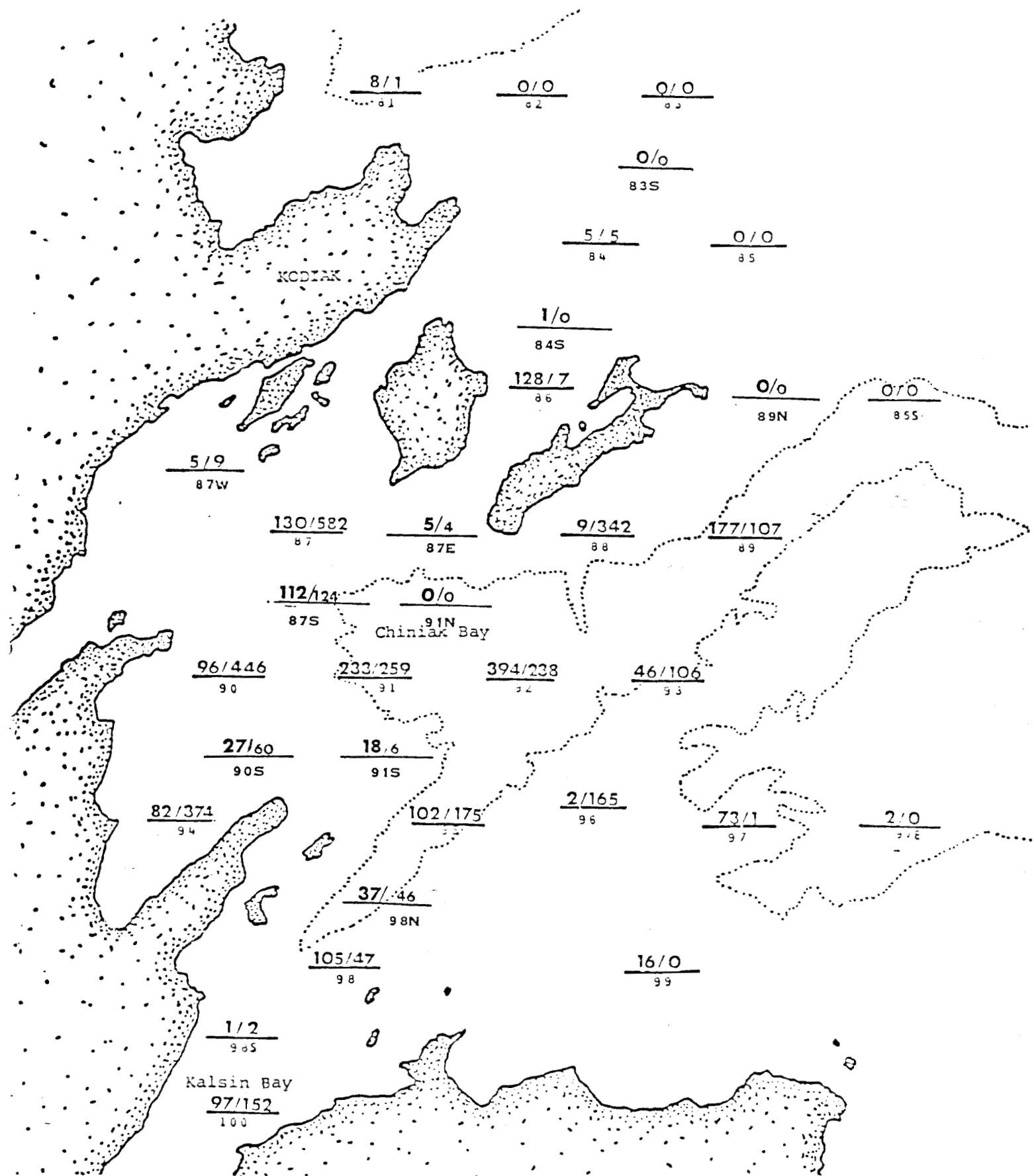


Figure 8h. Highest average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1972-1985).

Presented as: 1's + 2's/3's + 4's

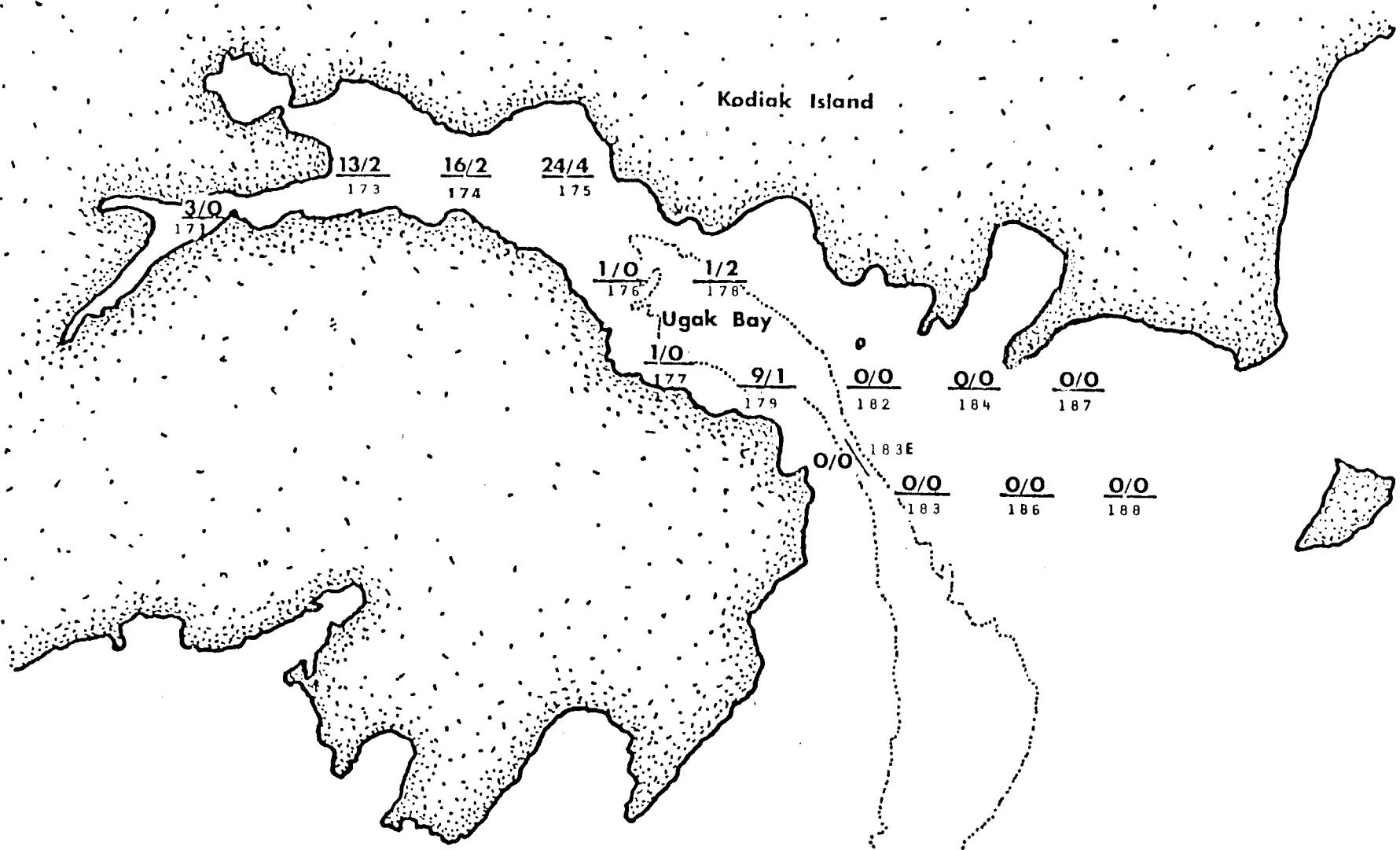


Figure 8i. Highest average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Ugak Bay, Kodiak Island (1972-1985).

Presented as: 1's + 2's/3's + 4's

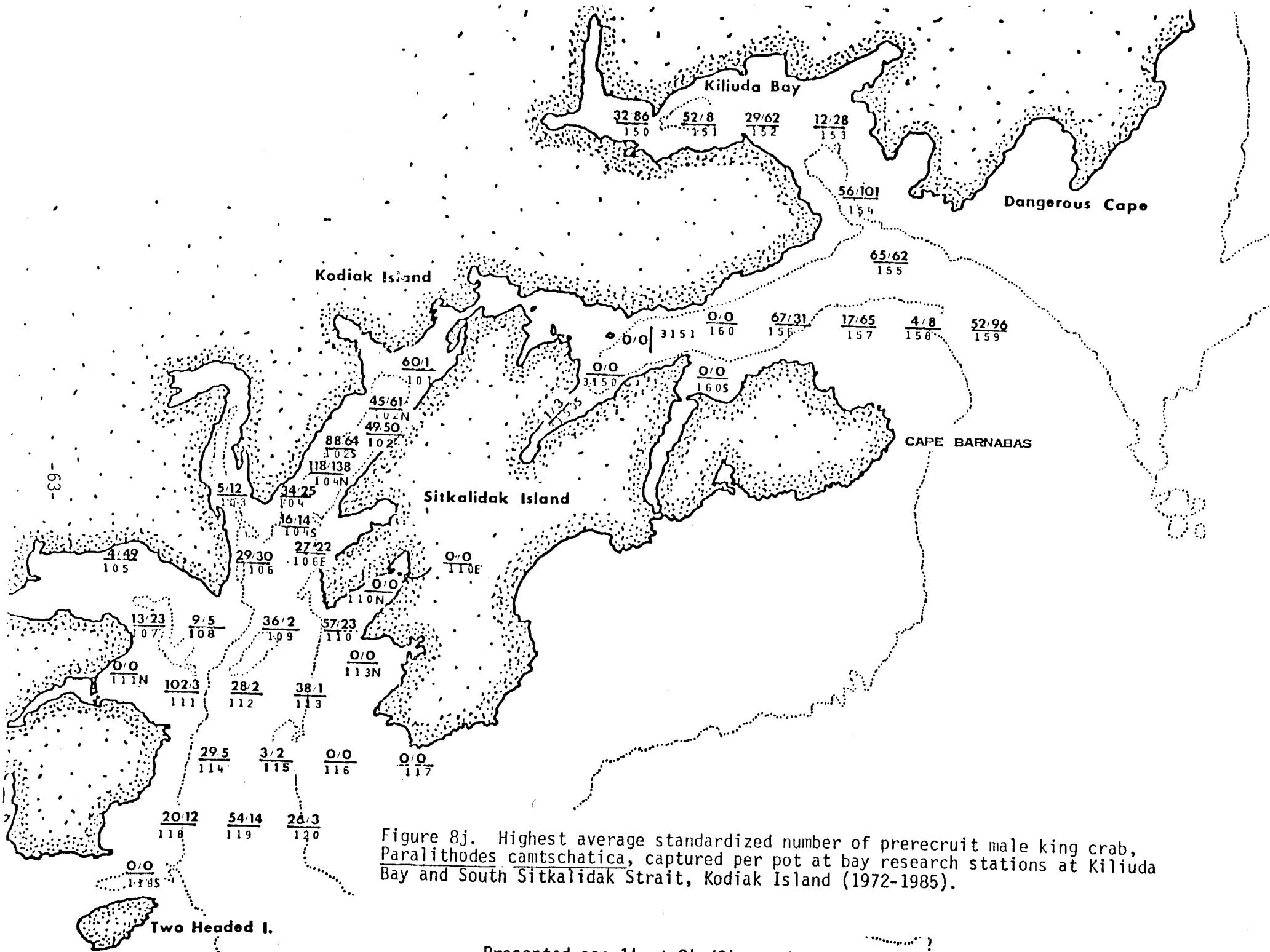


Figure 8j. Highest average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1972-1985).

Presented as: 1's + 2's/3's + 4's

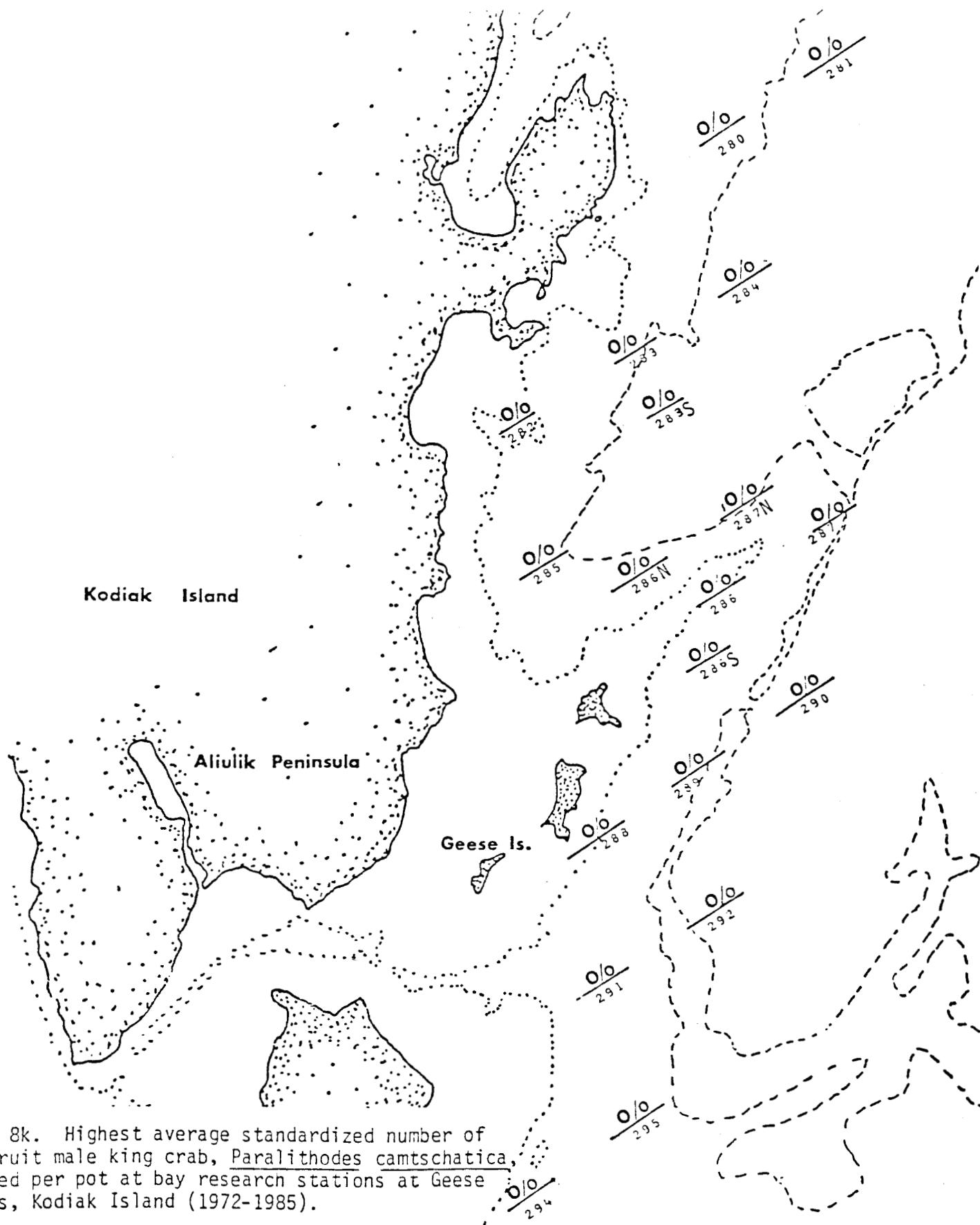


Figure 8k. Highest average standardized number of prerecruit male king crab, Paralithodes camtschatica captured per pot at bay research stations at Geese Islands, Kodiak Island (1972-1985).

Presented as: 1's + 2's/3's + 4's

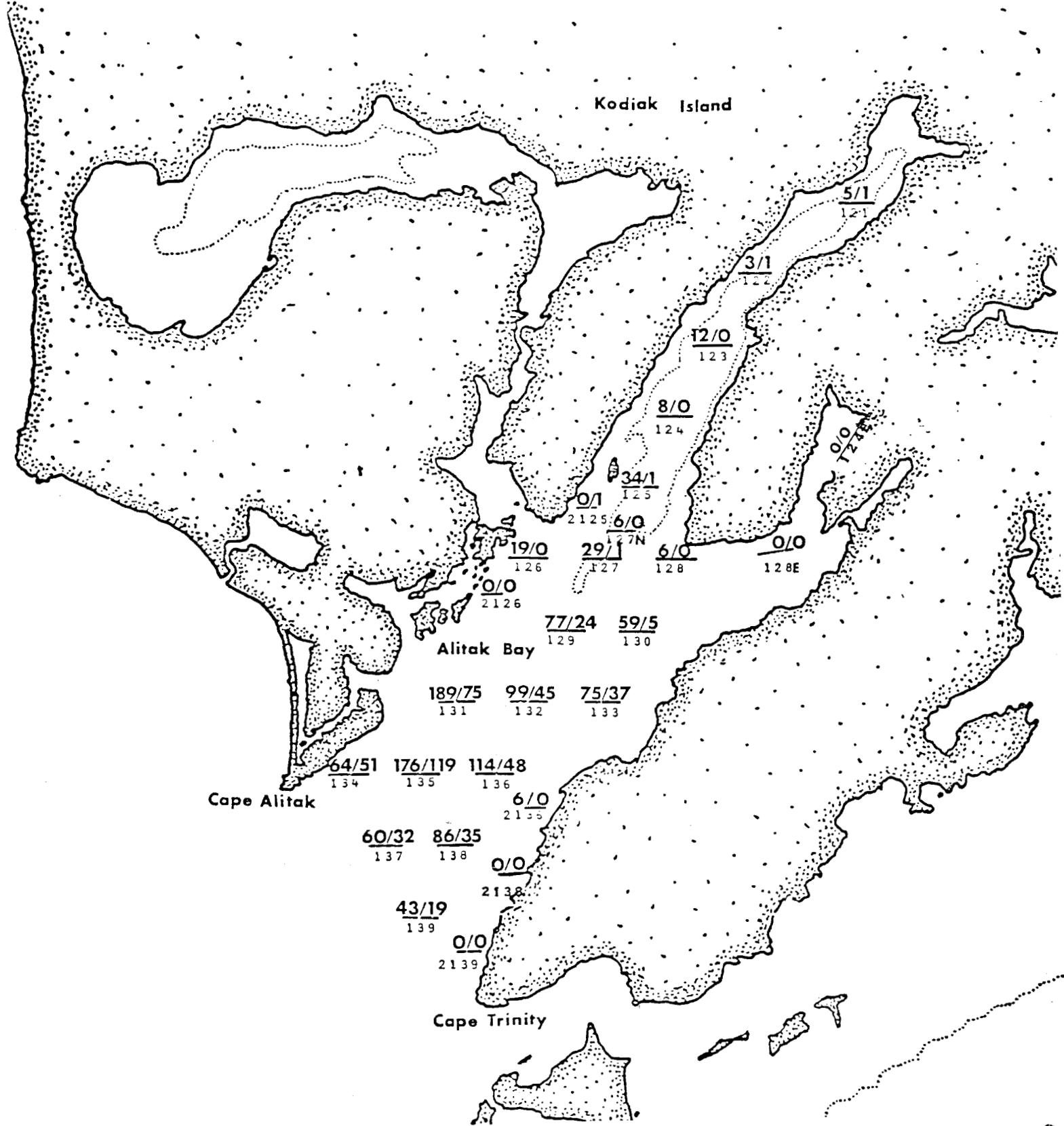
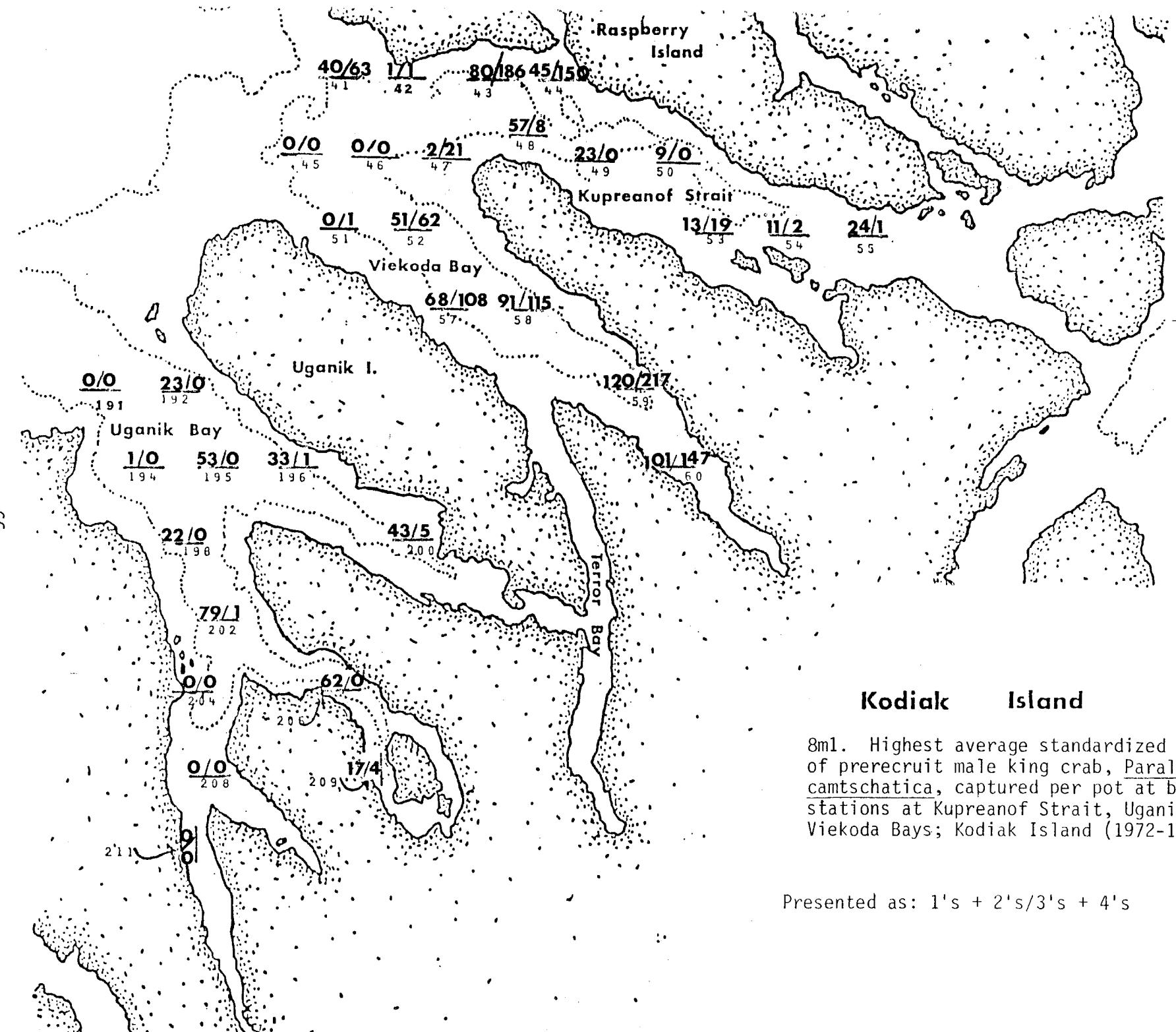


Figure 8L. Highest average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1972-1985).

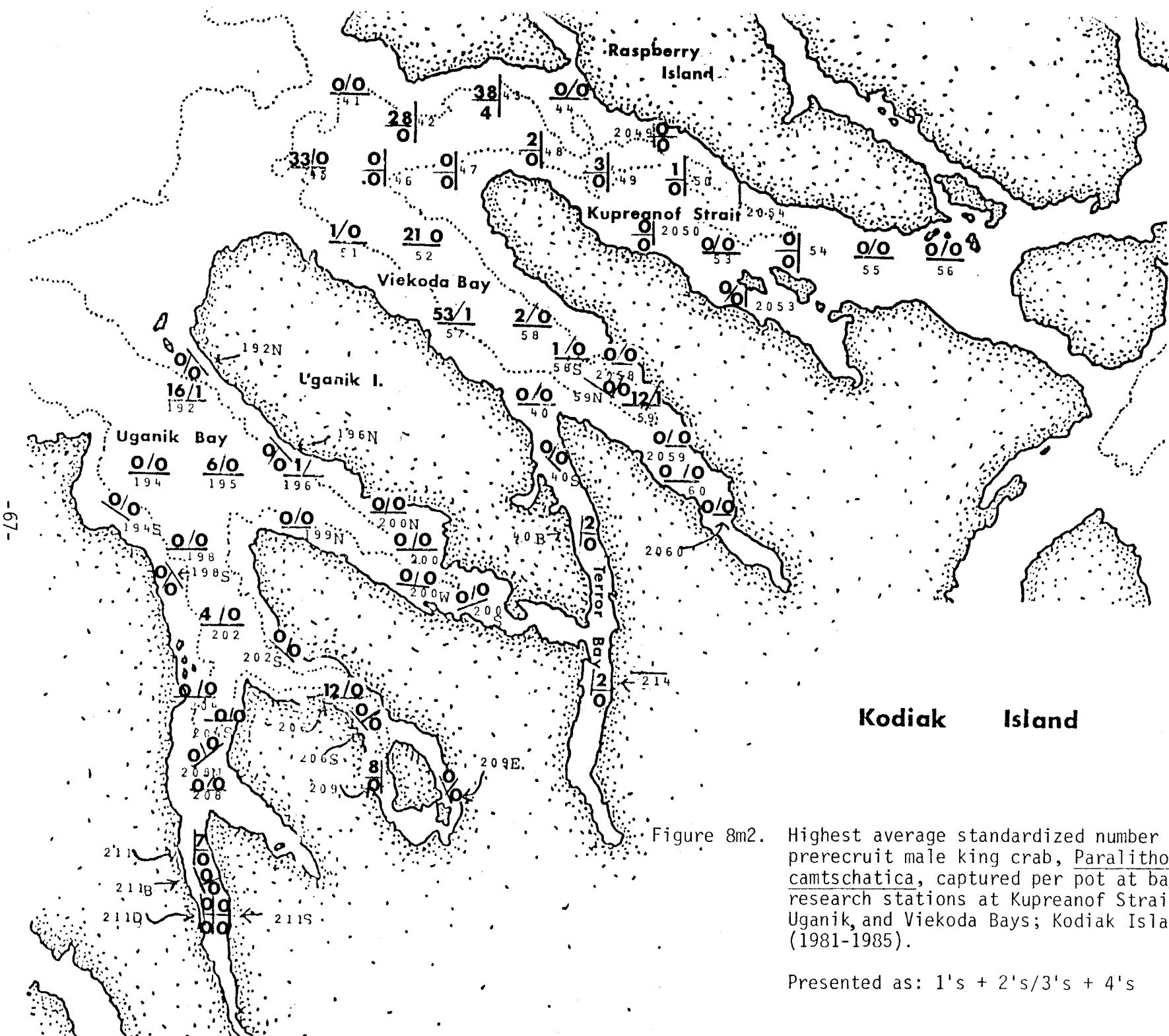
Presented as: 1's + 2's/3's + 4's



Kodiak Island

8m1. Highest average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kupreanof Strait, Uganik, and Viekoda Bays; Kodiak Island (1972-1980).

Presented as: 1's + 2's/3's + 4's



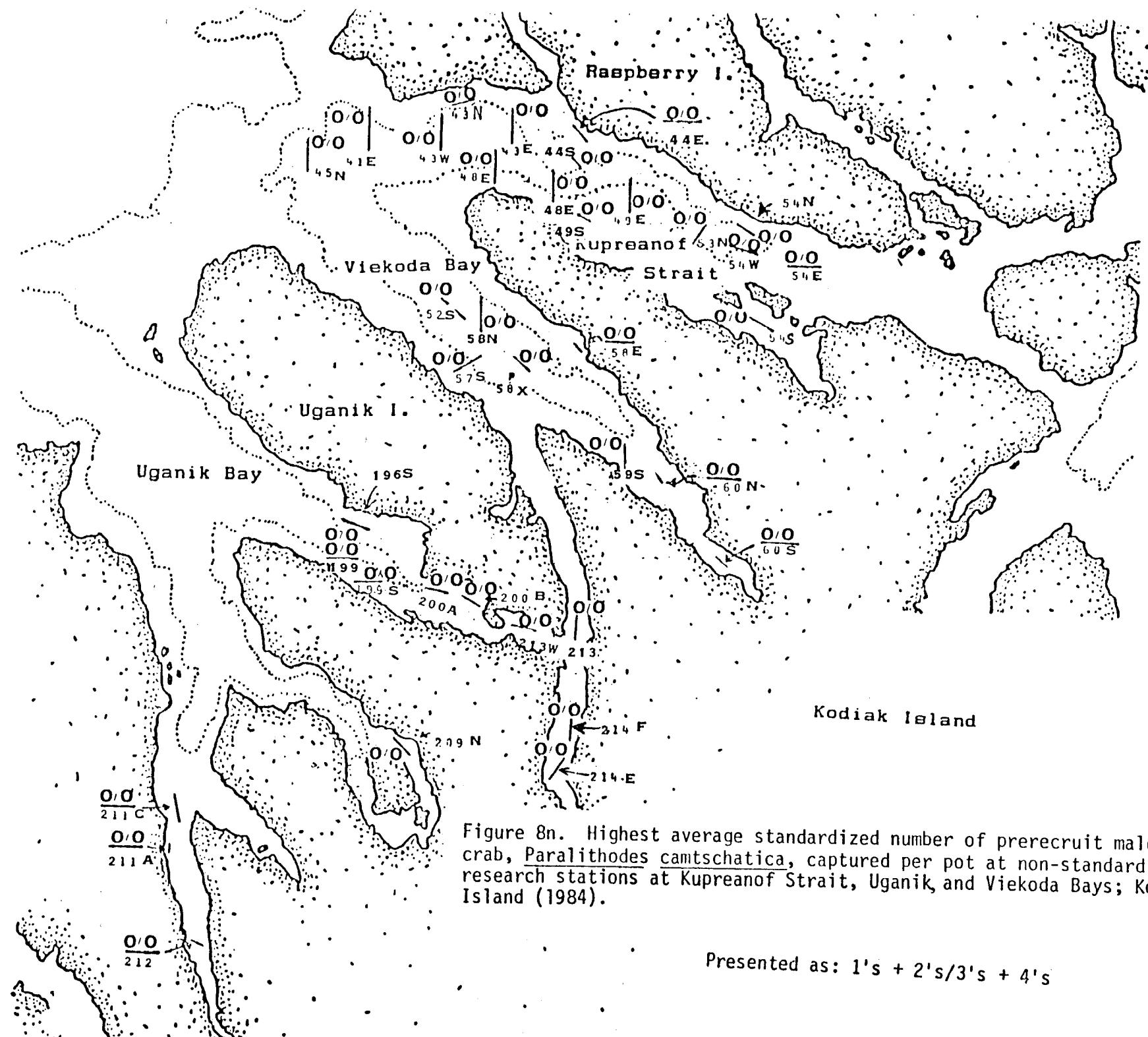


Figure 8n. Highest average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at non-standard bay research stations at Kupreanof Strait, Uganik, and Viekoda Bays; Kodiak Island (1984).

Presented as: 1's + 2's/3's + 4's

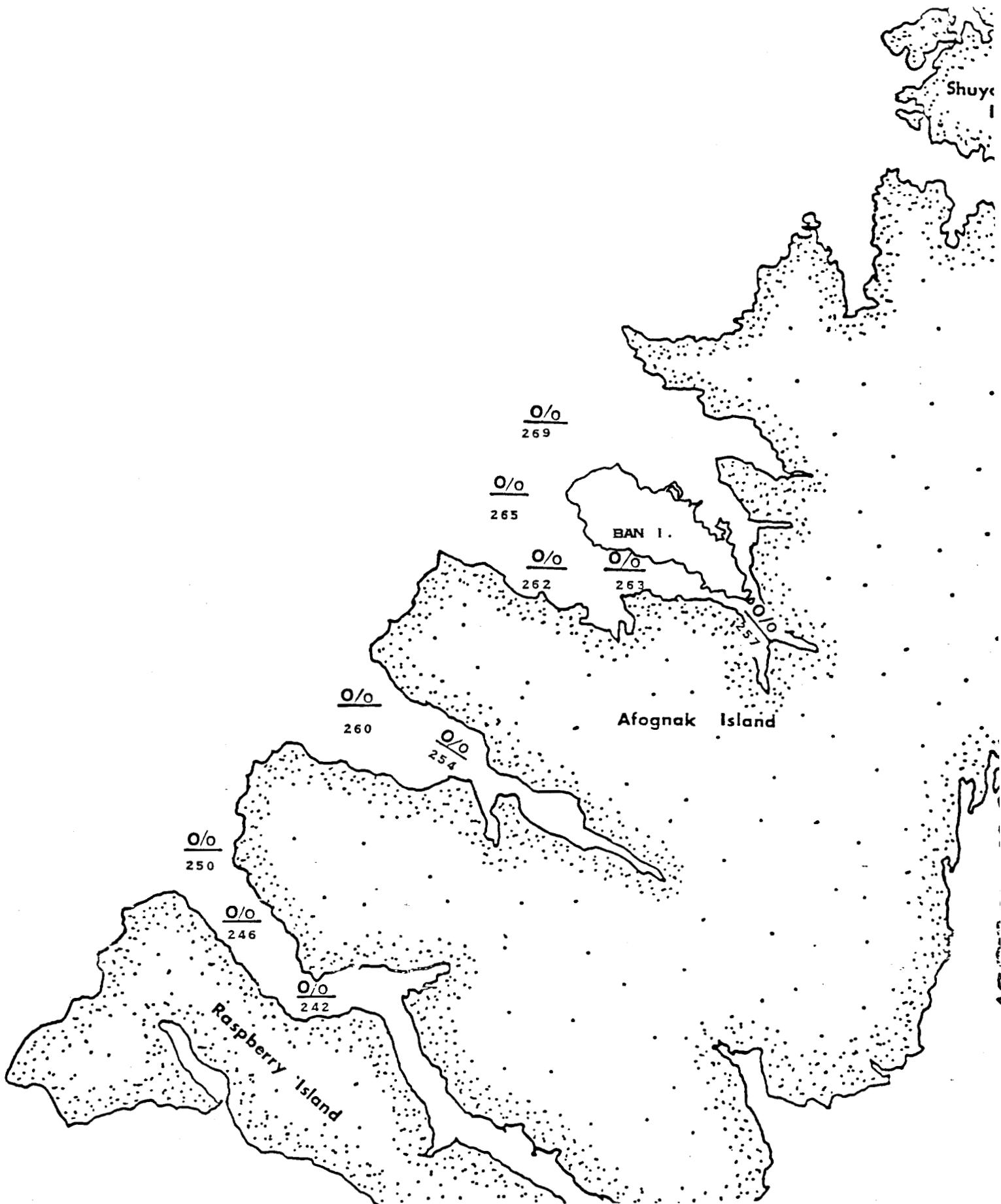


Figure 8o. Highest average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at the West Side of Afognak Island (1972-1985).

-69- Presented as: 1's + 2's/3's + 4's

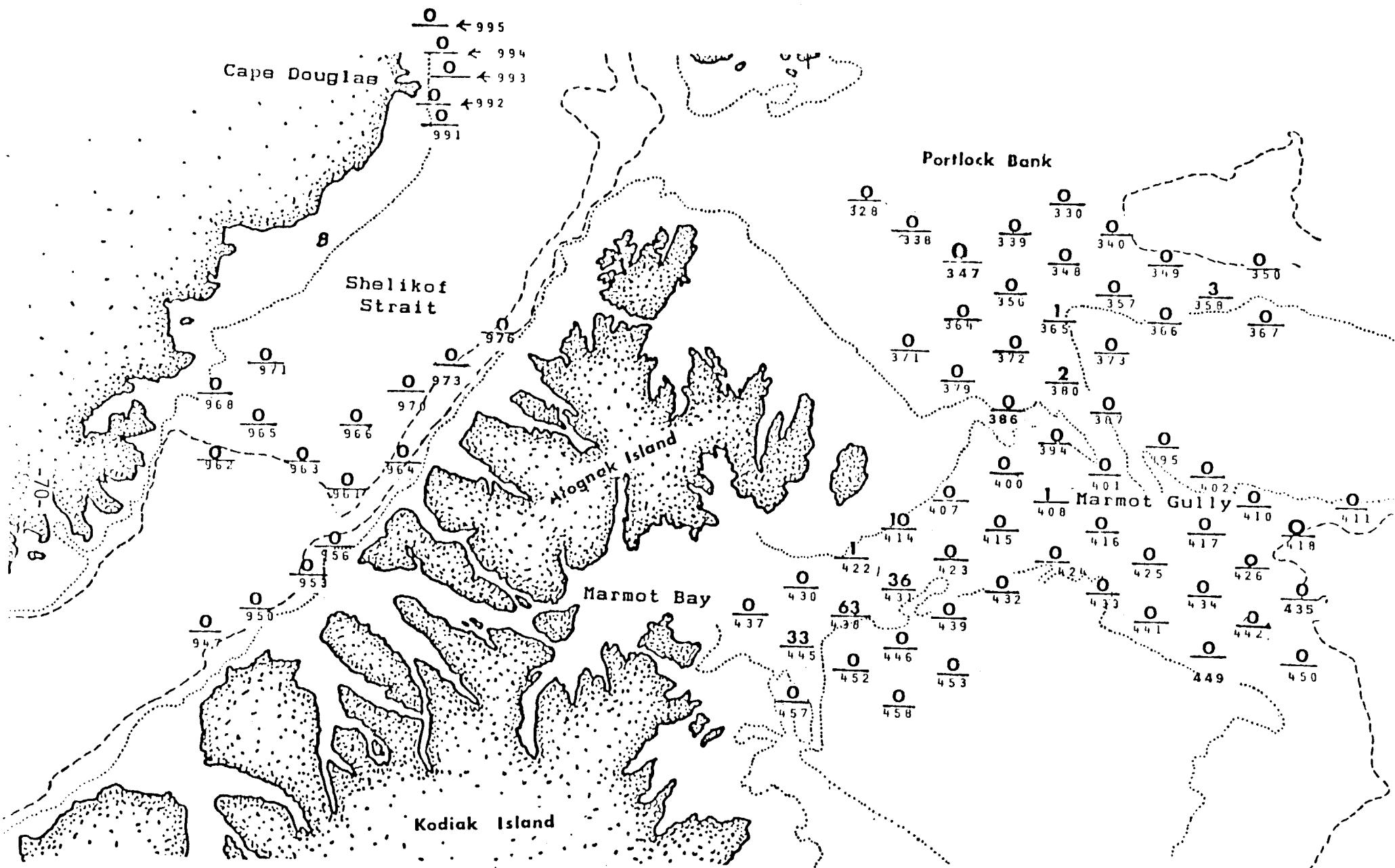


Figure 9a. Highest average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1972-1985).

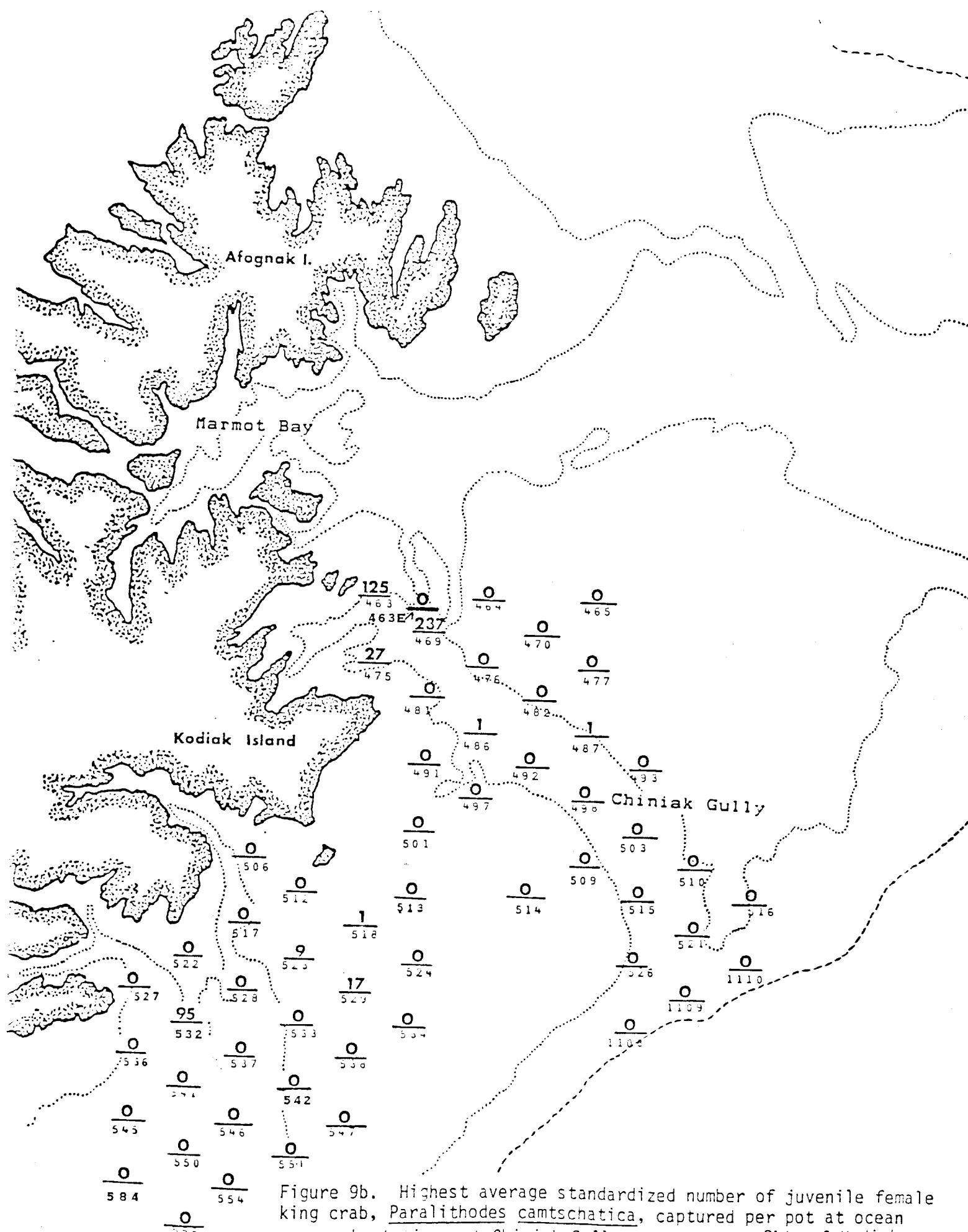


Figure 9b. Highest average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1972-1985). -71-

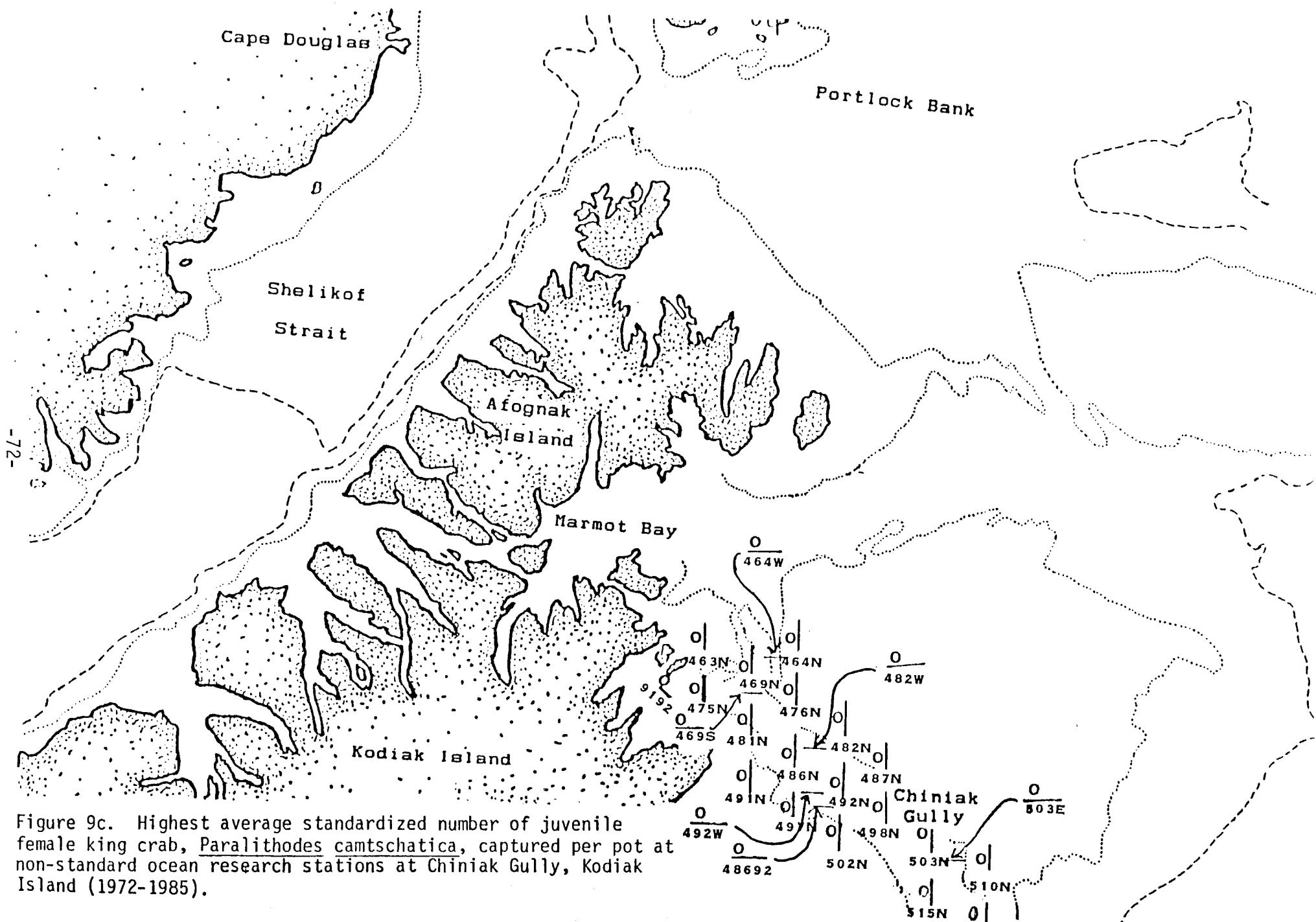
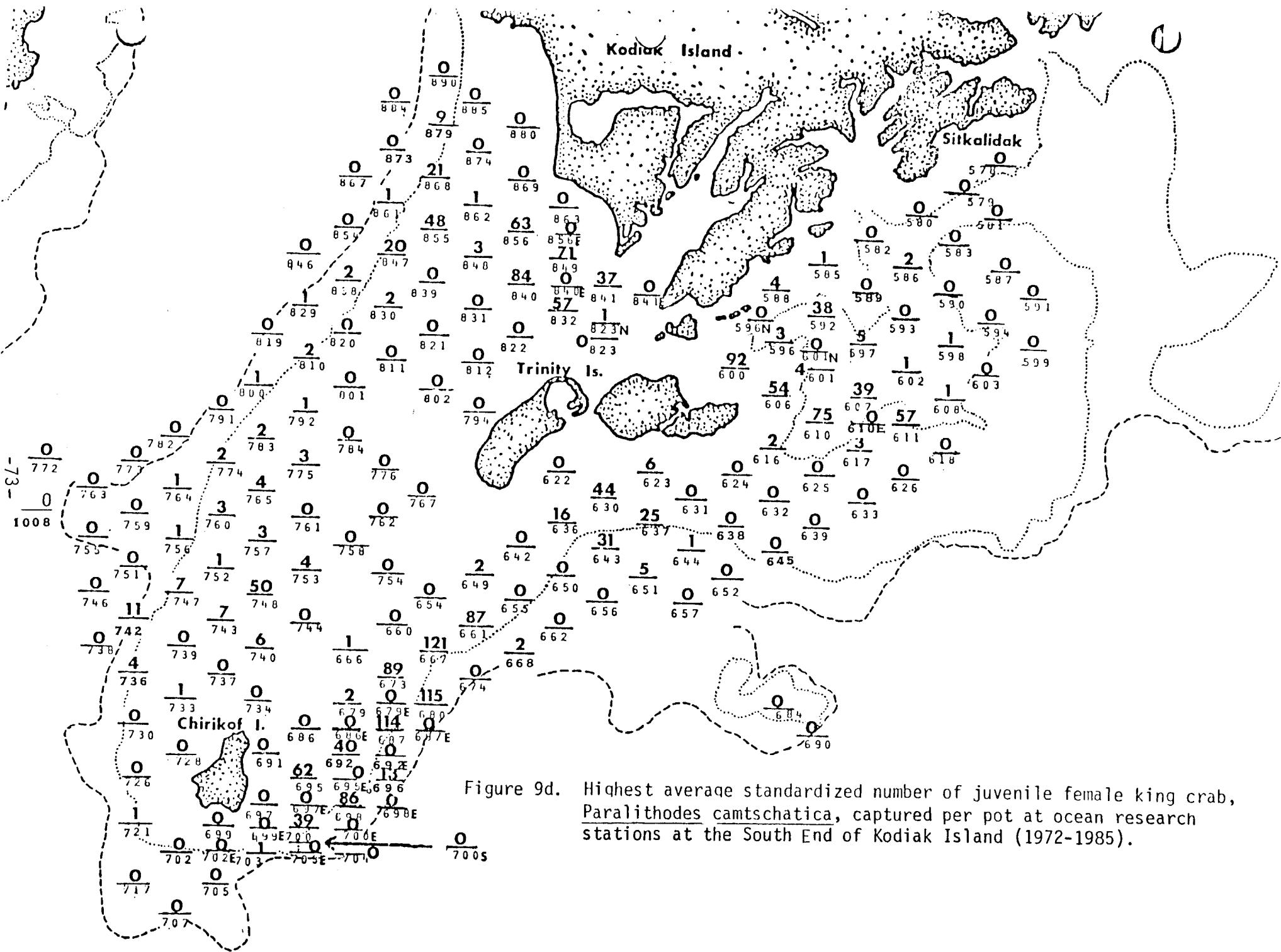
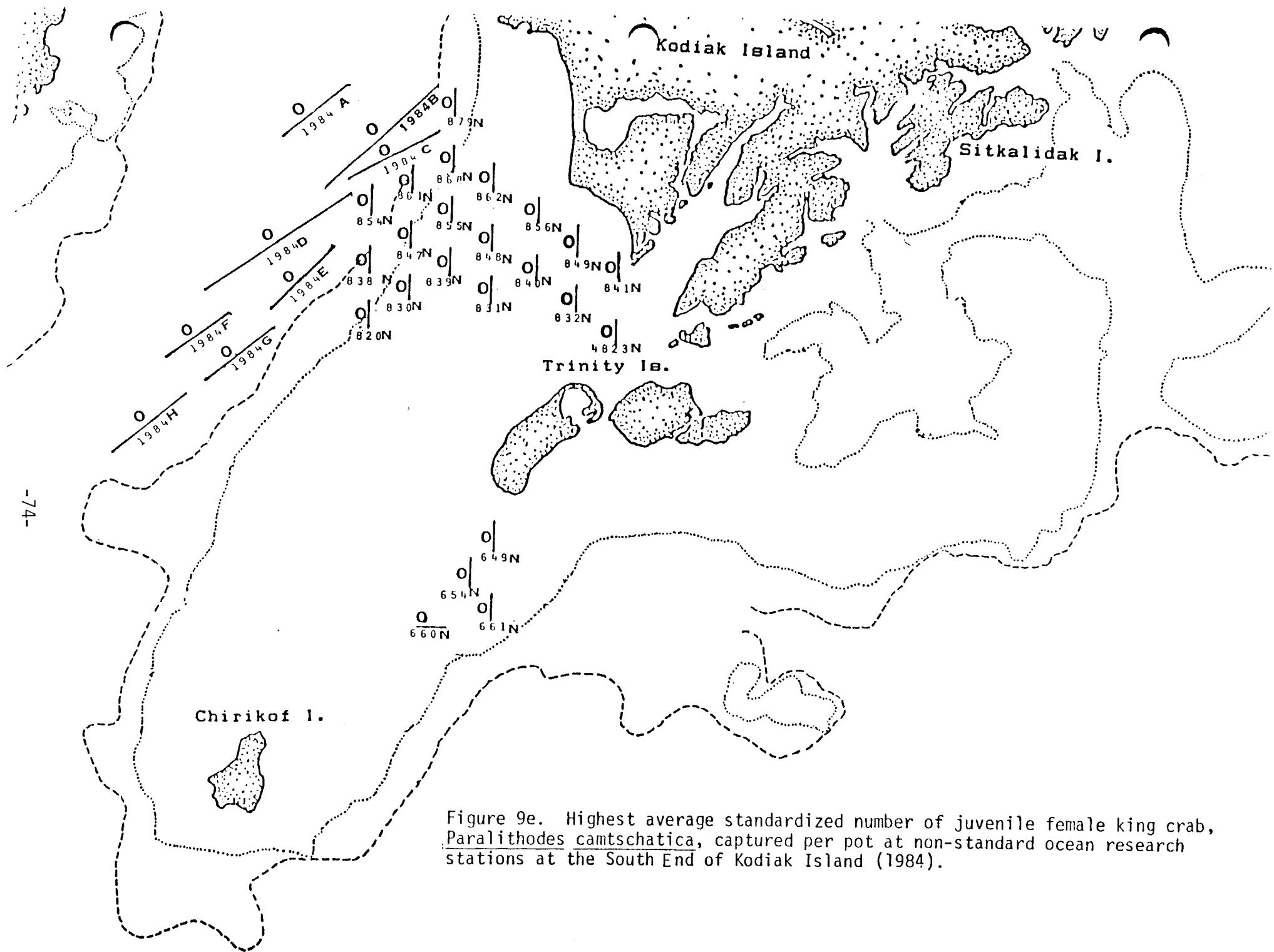


Figure 9c. Highest average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at non-standard ocean research stations at Chiniak Gully, Kodiak Island (1972-1985).





Shuyak Island

0  
1

0  
2      0  
3

0  
4      0  
5      0  
6      0  
7

Perenosa Bay

0  
8      0  
9      0  
10     0  
11     0  
12

0  
13     0  
14     0  
15

0  
16

Tonki Bay

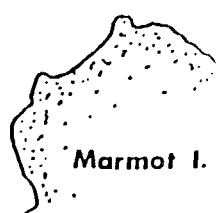
4  
17

0  
18

5  
19

AFOGNAK ISLAND

Figure 9f. Highest average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Tonki Bay, Afognak Island (1972-1985).



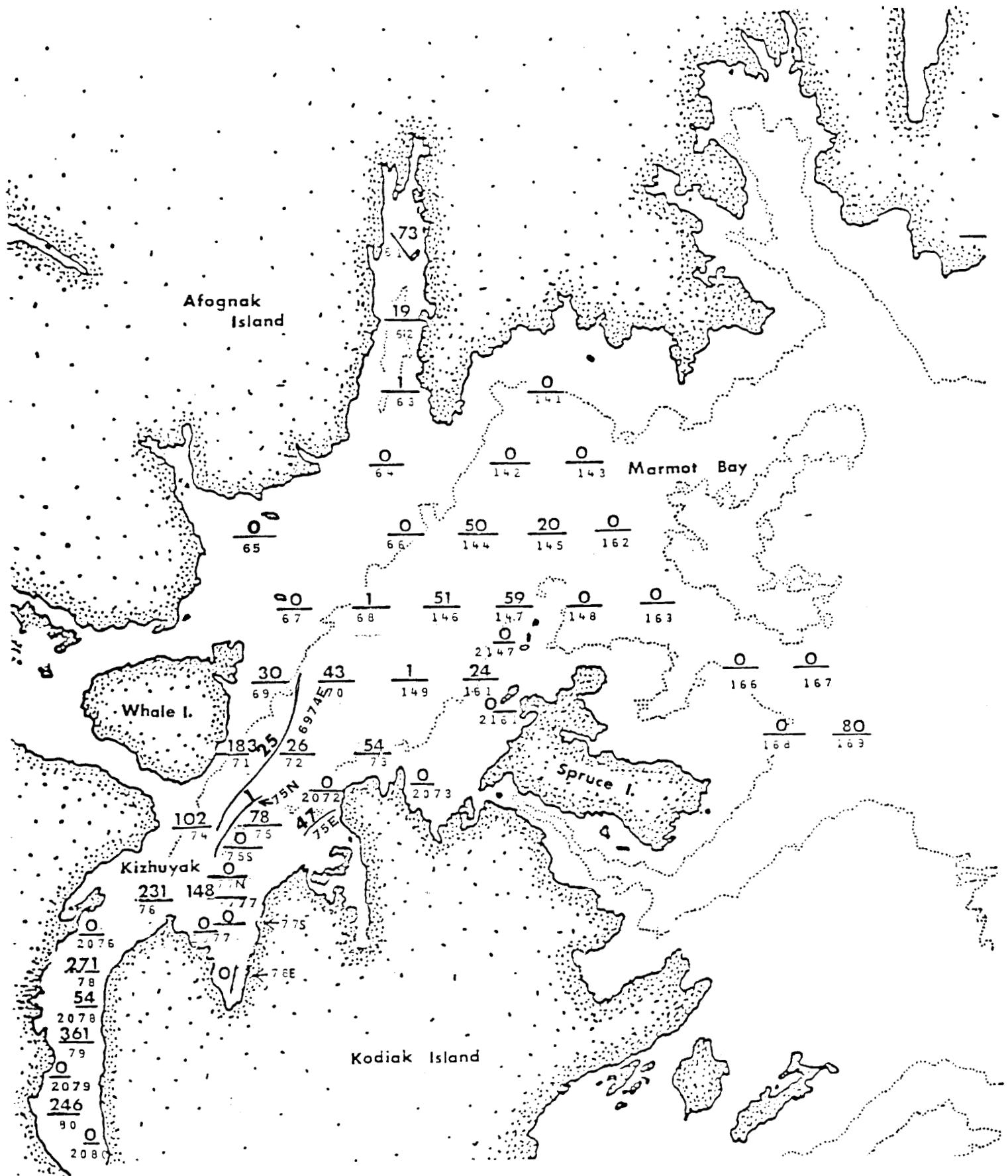


Figure 9g. Highest average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Marmot and Kizhuyak bays, Kodiak Island (1972-1985).

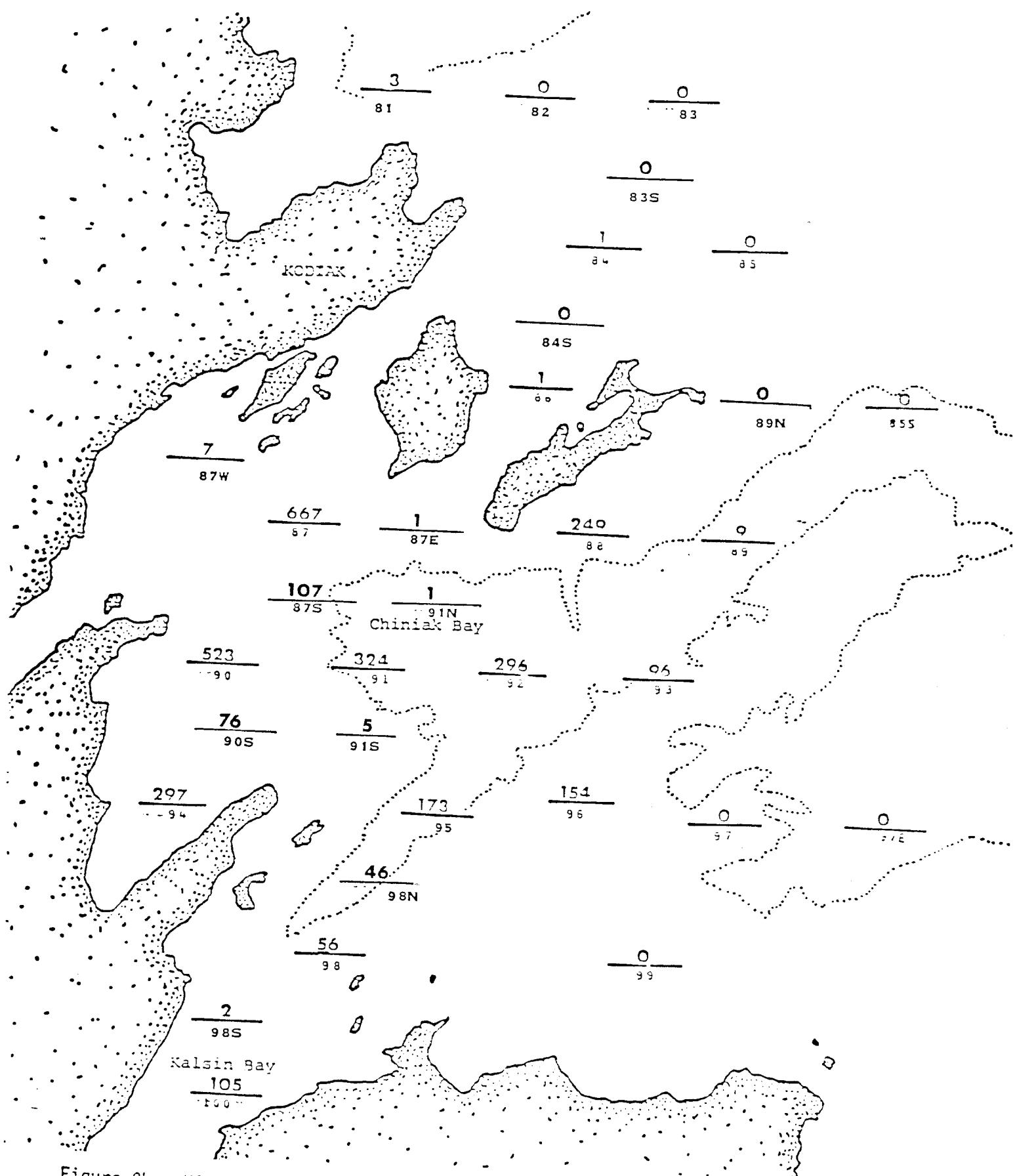


Figure 9h. Highest average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1972-1985).

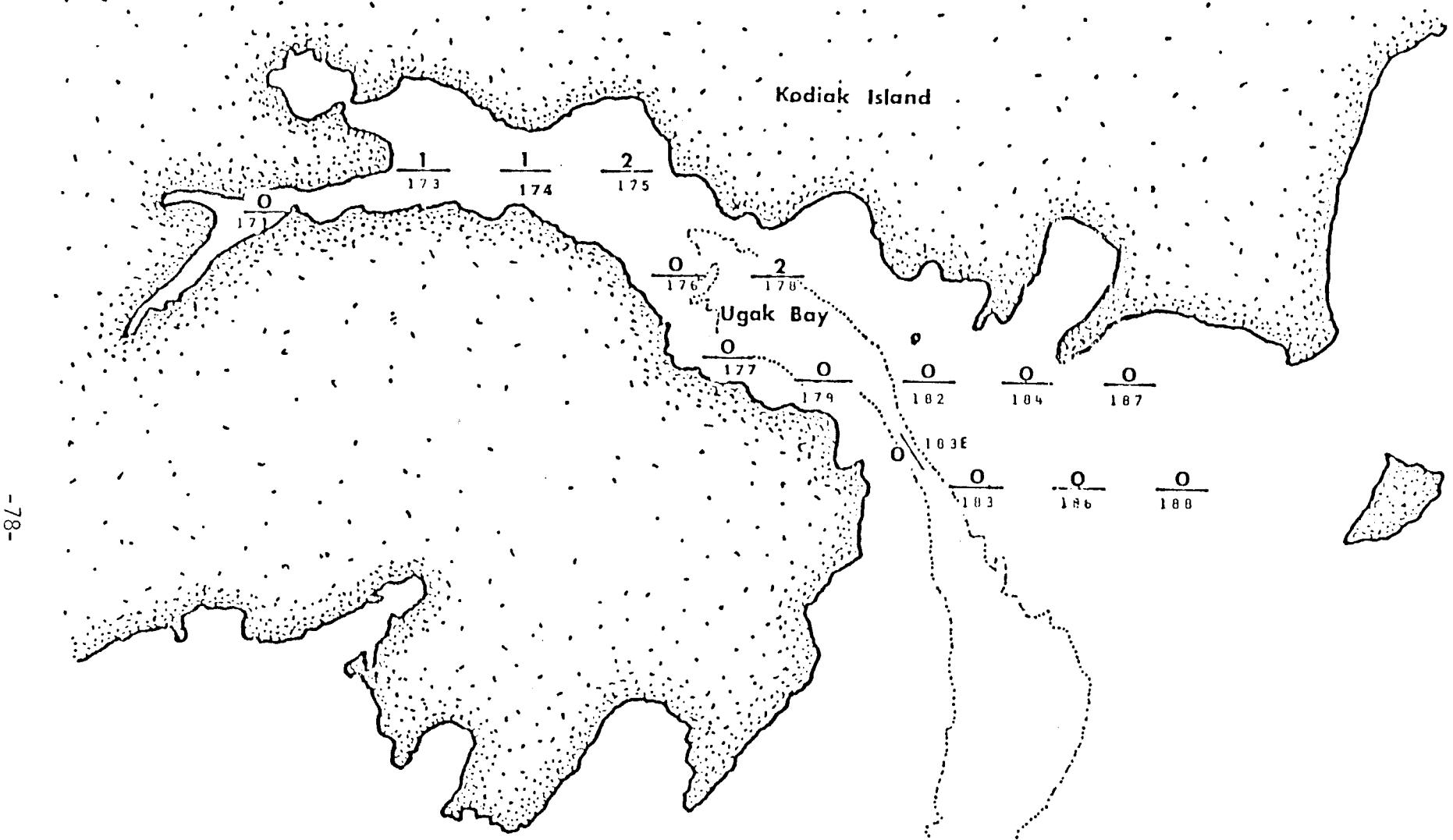


Figure 9i. Highest average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Ugak Bay, Kodiak Island (1972-1985).

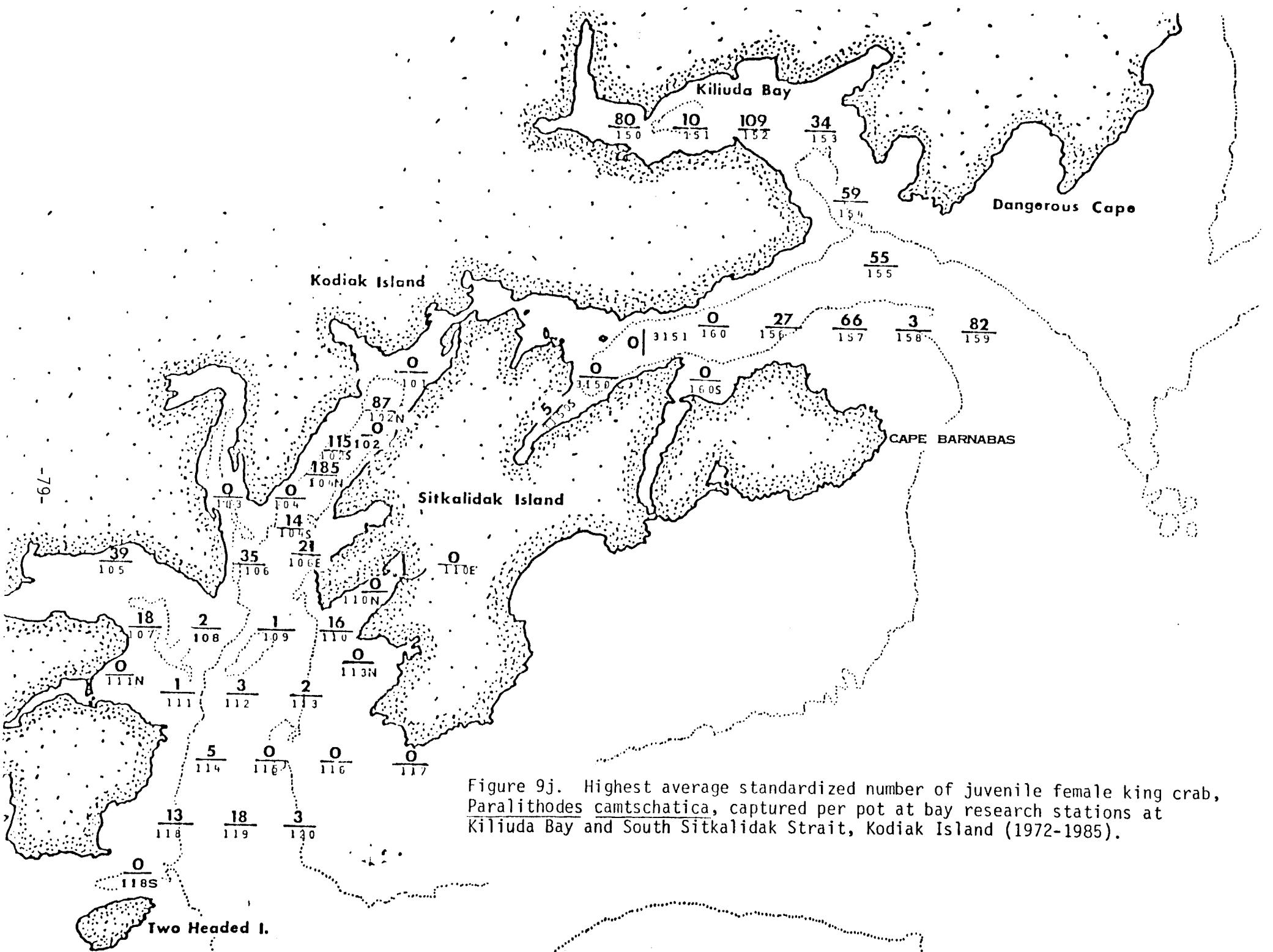


Figure 9j. Highest average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1972-1985).

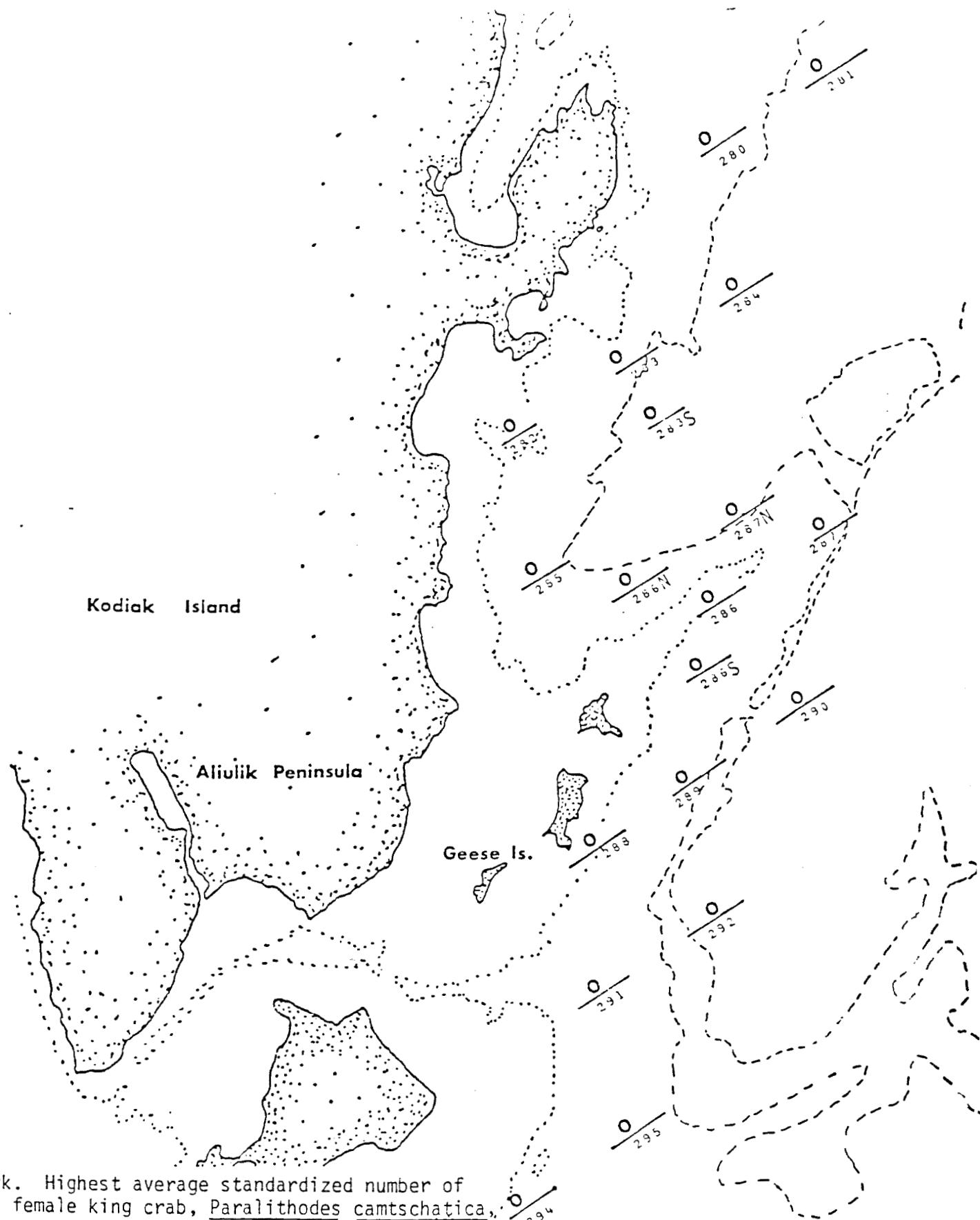


Figure 9k. Highest average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Geese Islands, Kodiak Island (1972-1985).

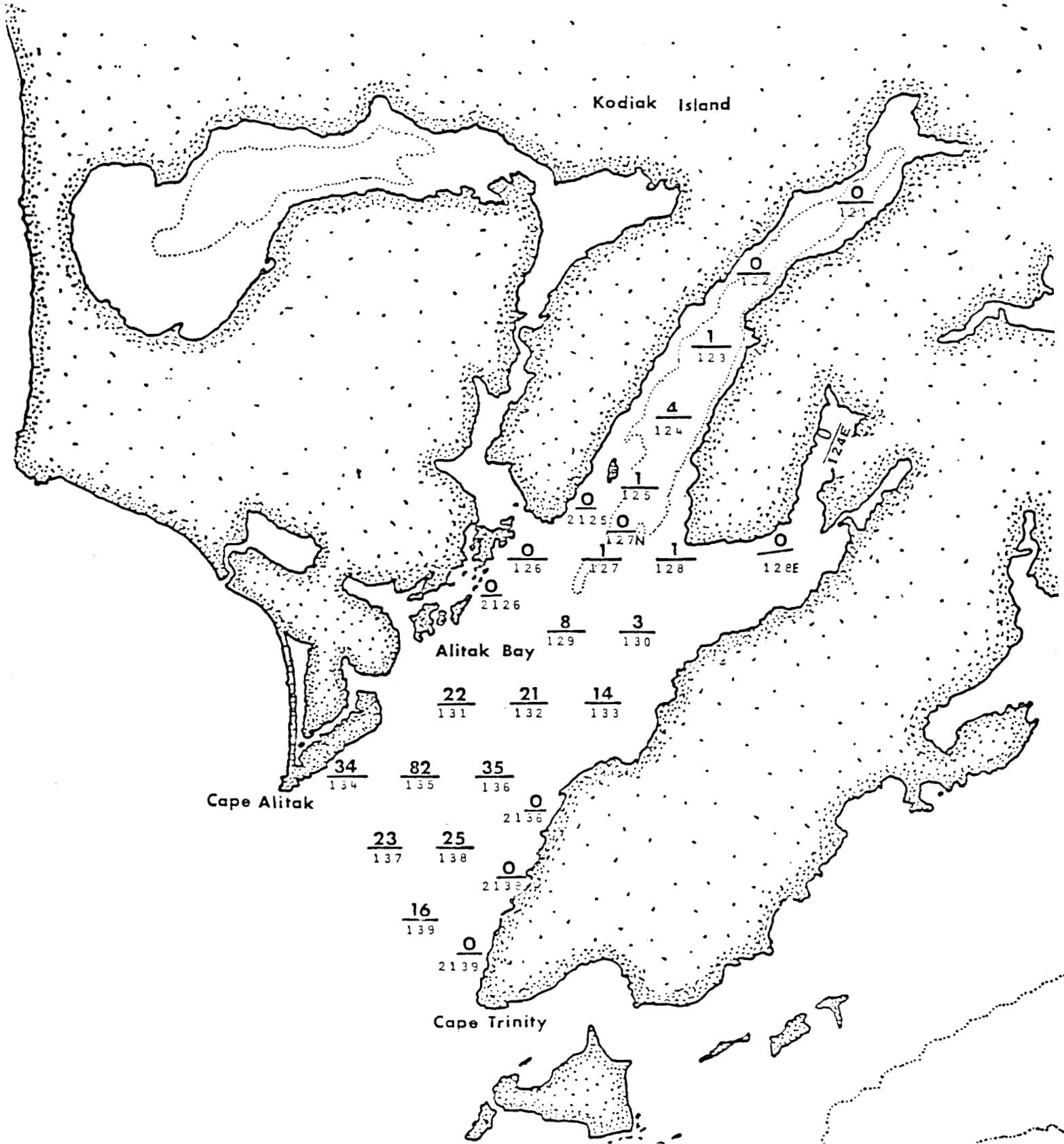


Figure 9L. Highest average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1972-1985).

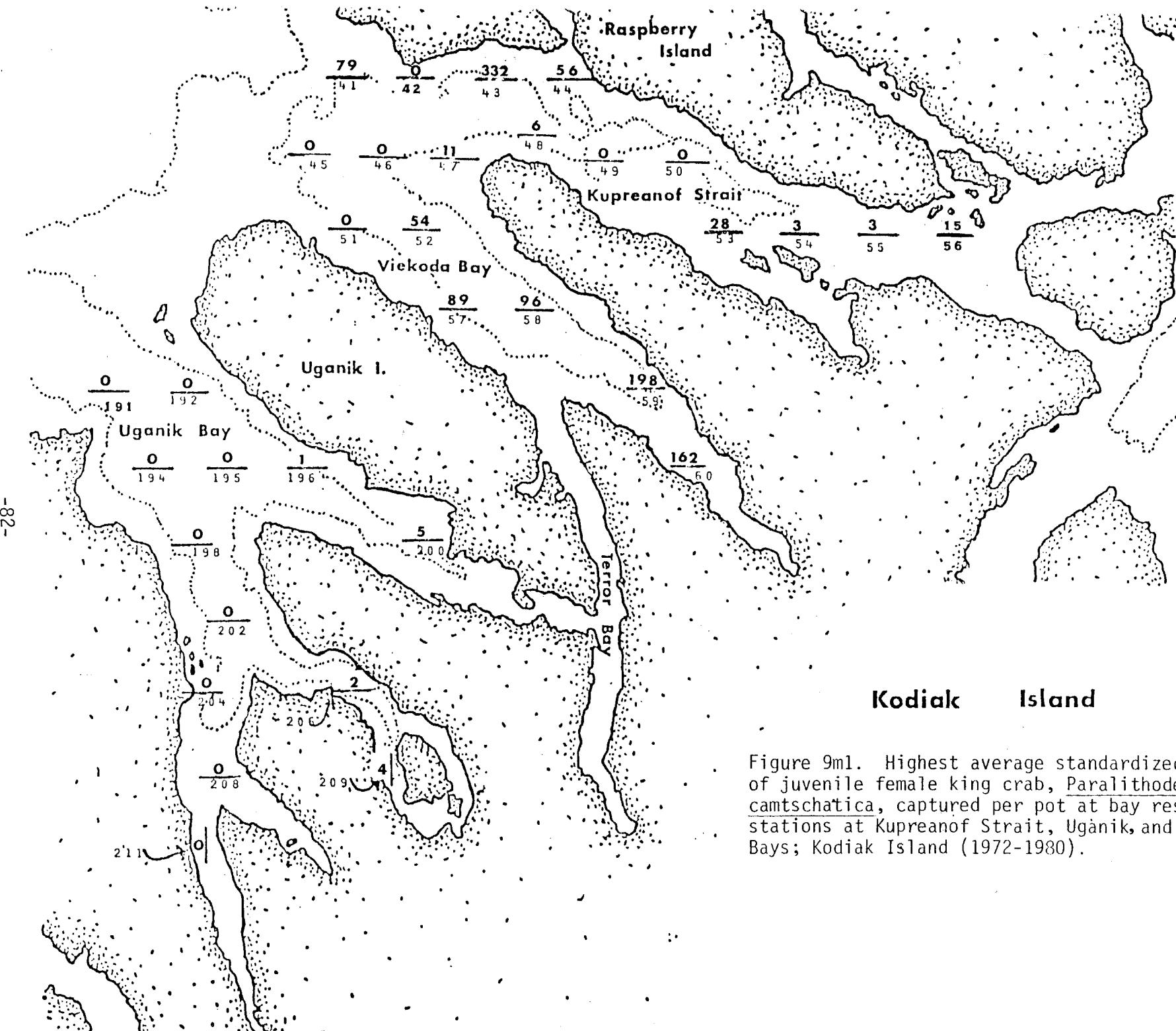
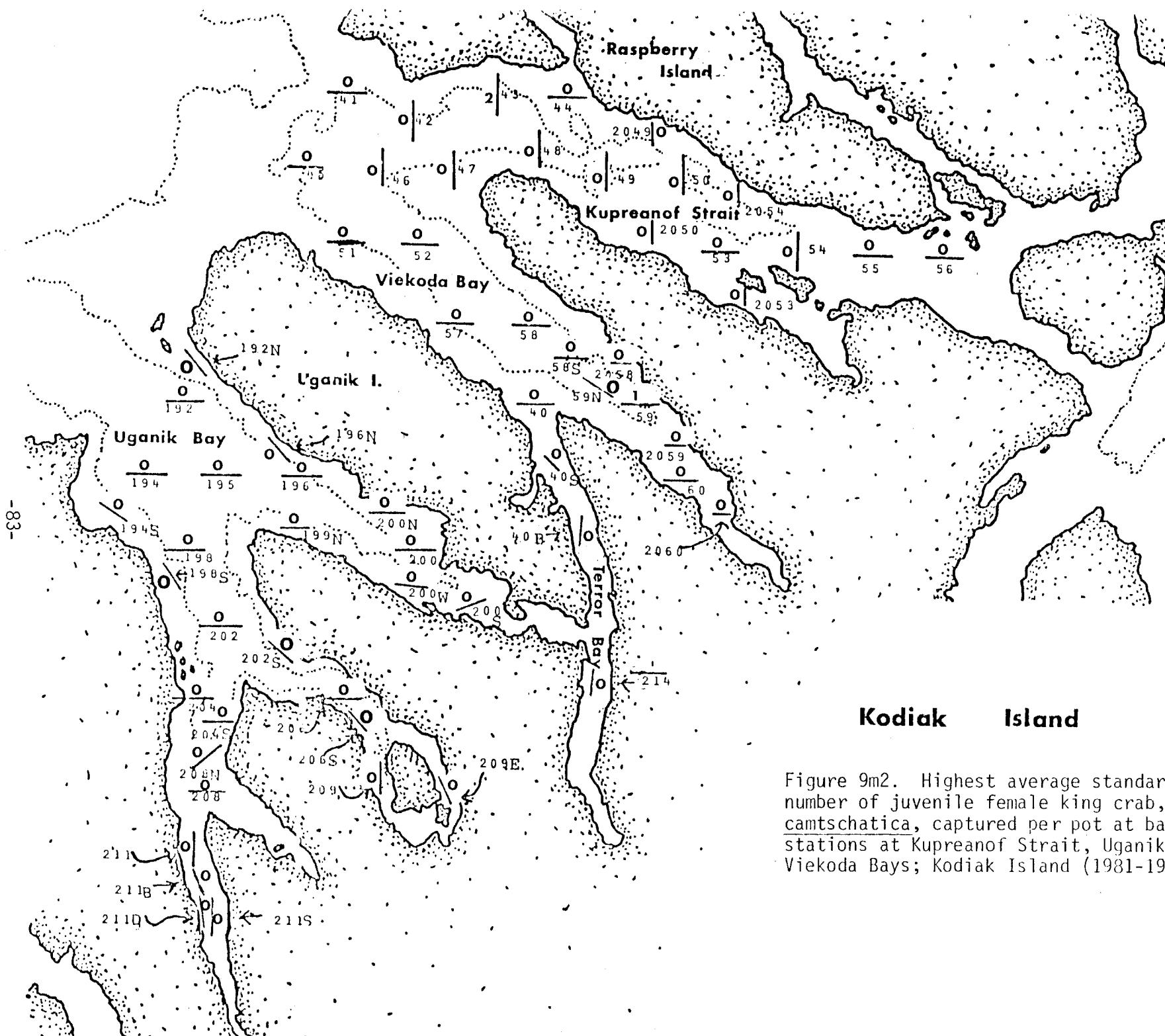


Figure 9ml. Highest average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kupreanof Strait, Ugânik, and Viekoda Bays; Kodiak Island (1972-1980).



## Kodiak Island

Figure 9m2. Highest average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kupreanof Strait, Uganiik, and Viekoda Bays; Kodiak Island (1981-1985).

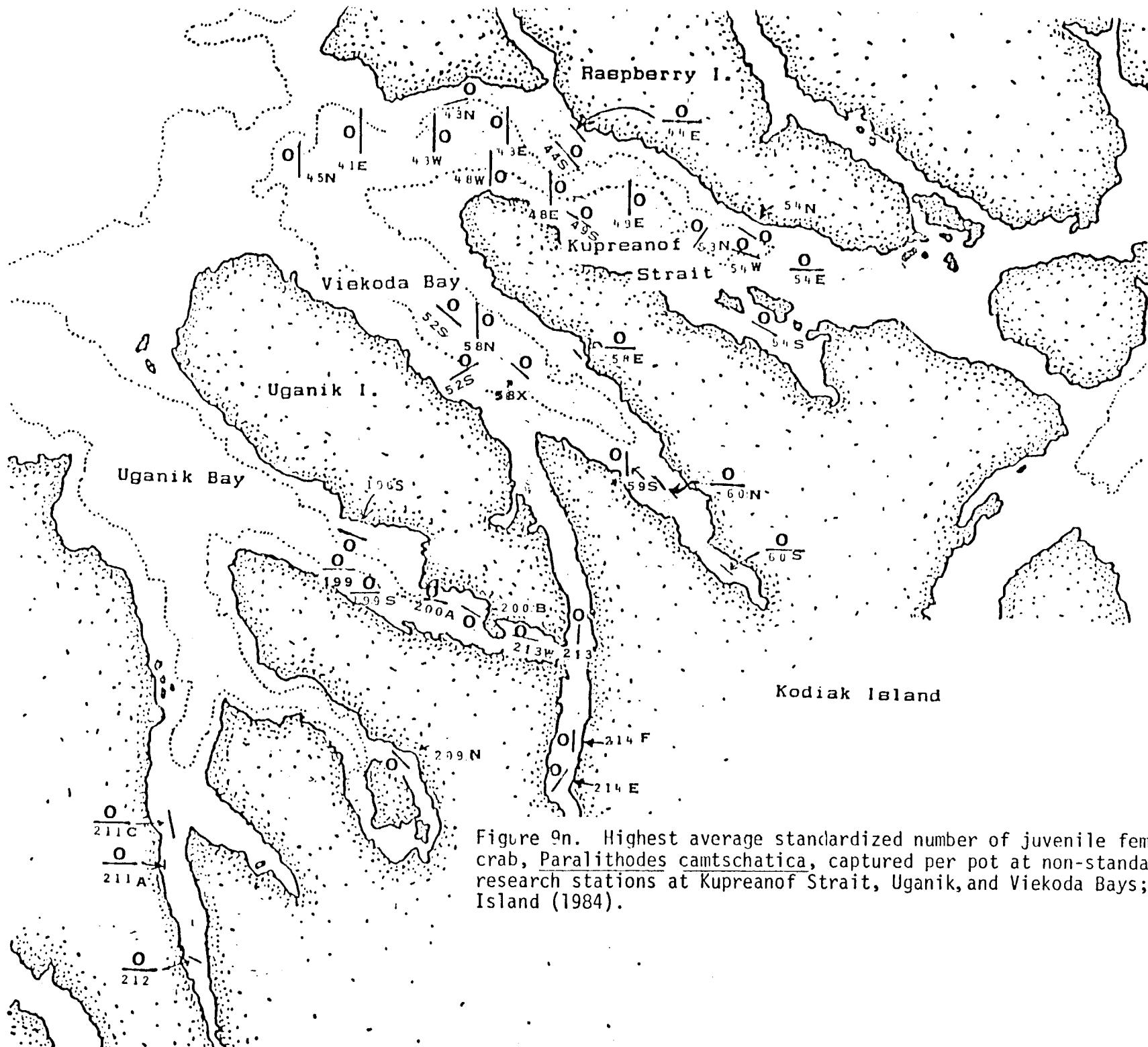


Figure 9n. Highest average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at non-standard bay research stations at Kupreanof Strait, Uganik, and Viekoda Bays; Kodiak Island (1984).

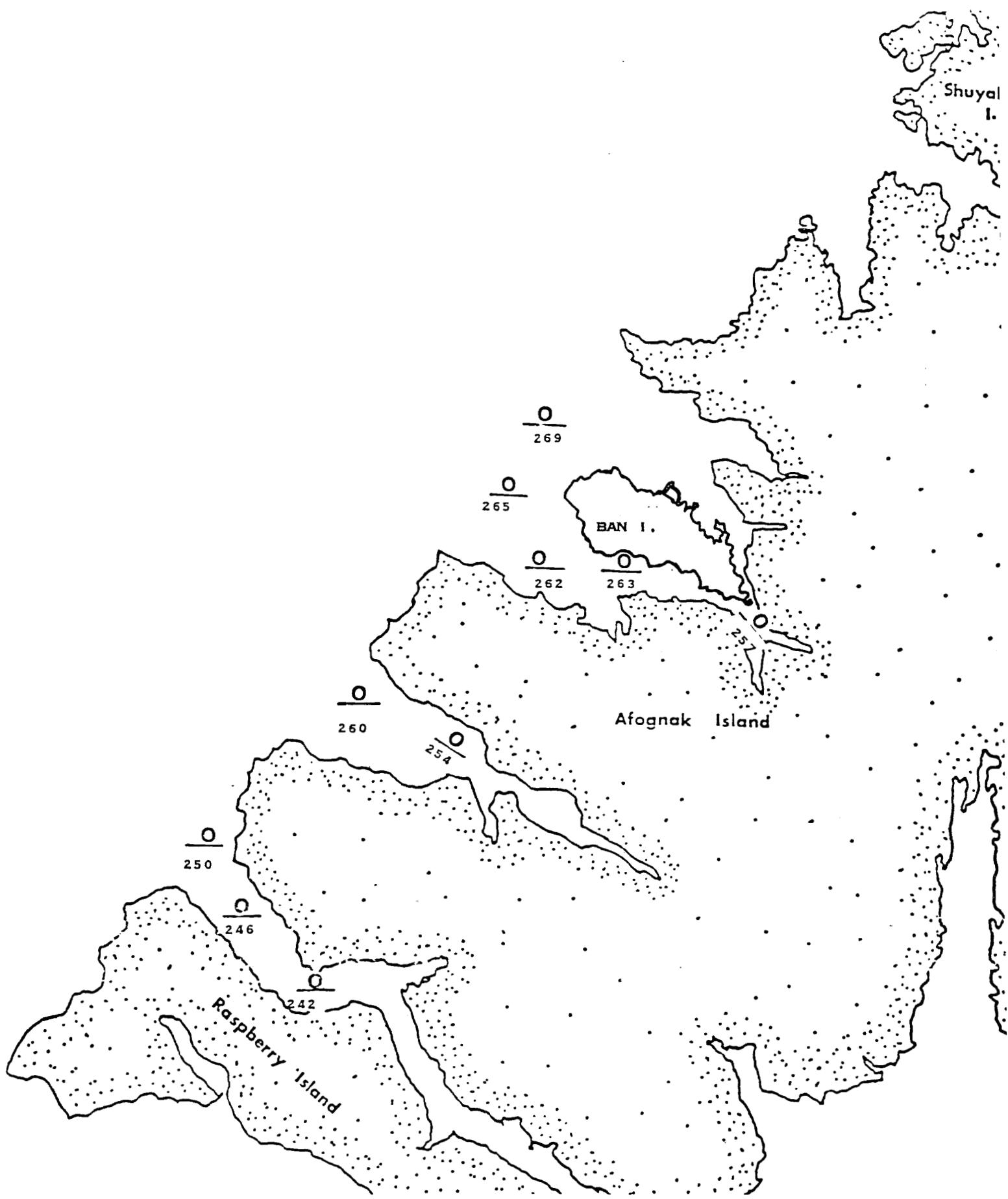


Figure 9o. Highest average standardized number of juvenile female king crab, Paralithode camtschatica, captured per pot at bay research stations at the West Side of Afognak Island (1972-1985).

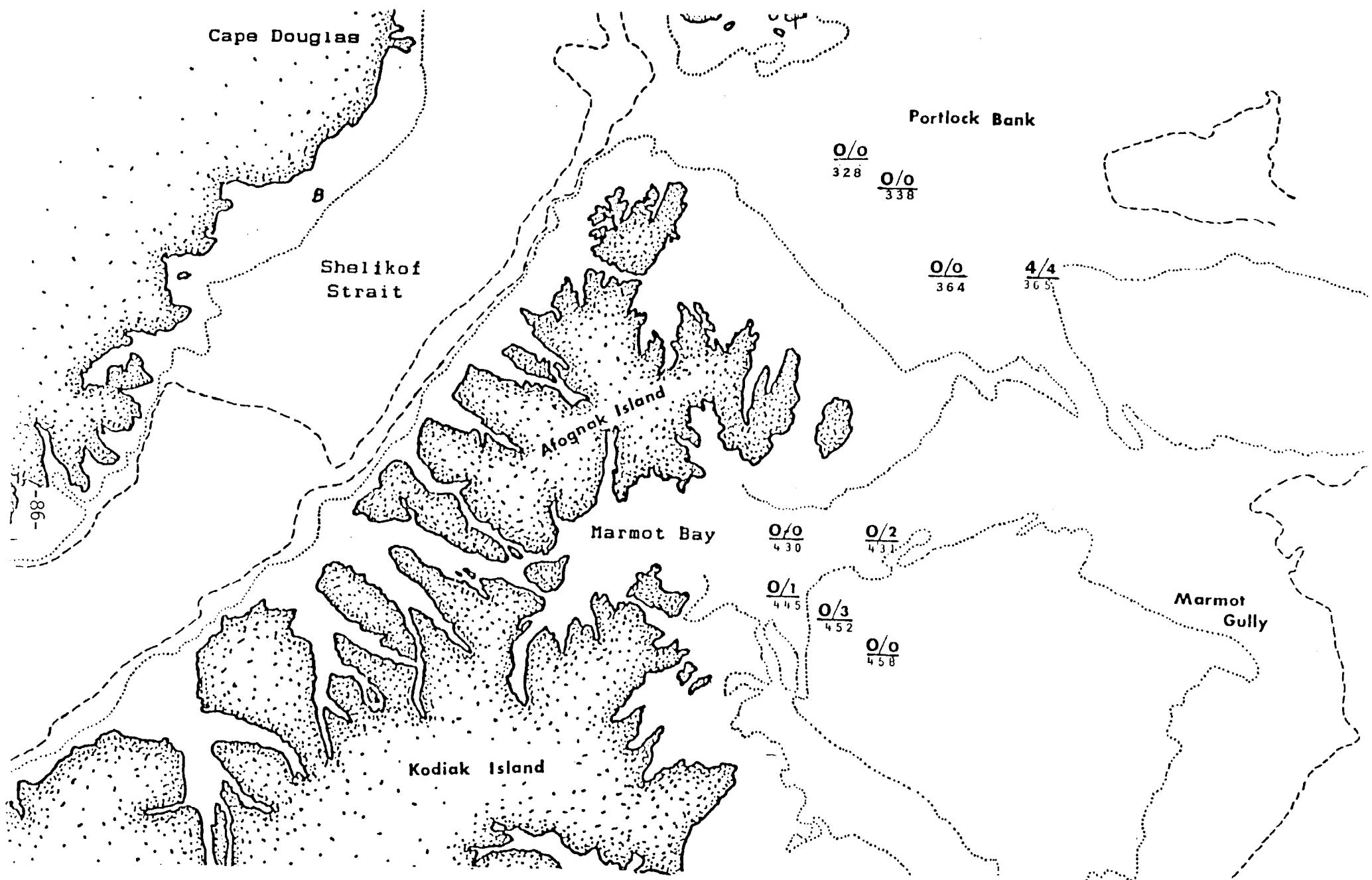


Figure 10a. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1972).

Presented as: Legal males/Adult females

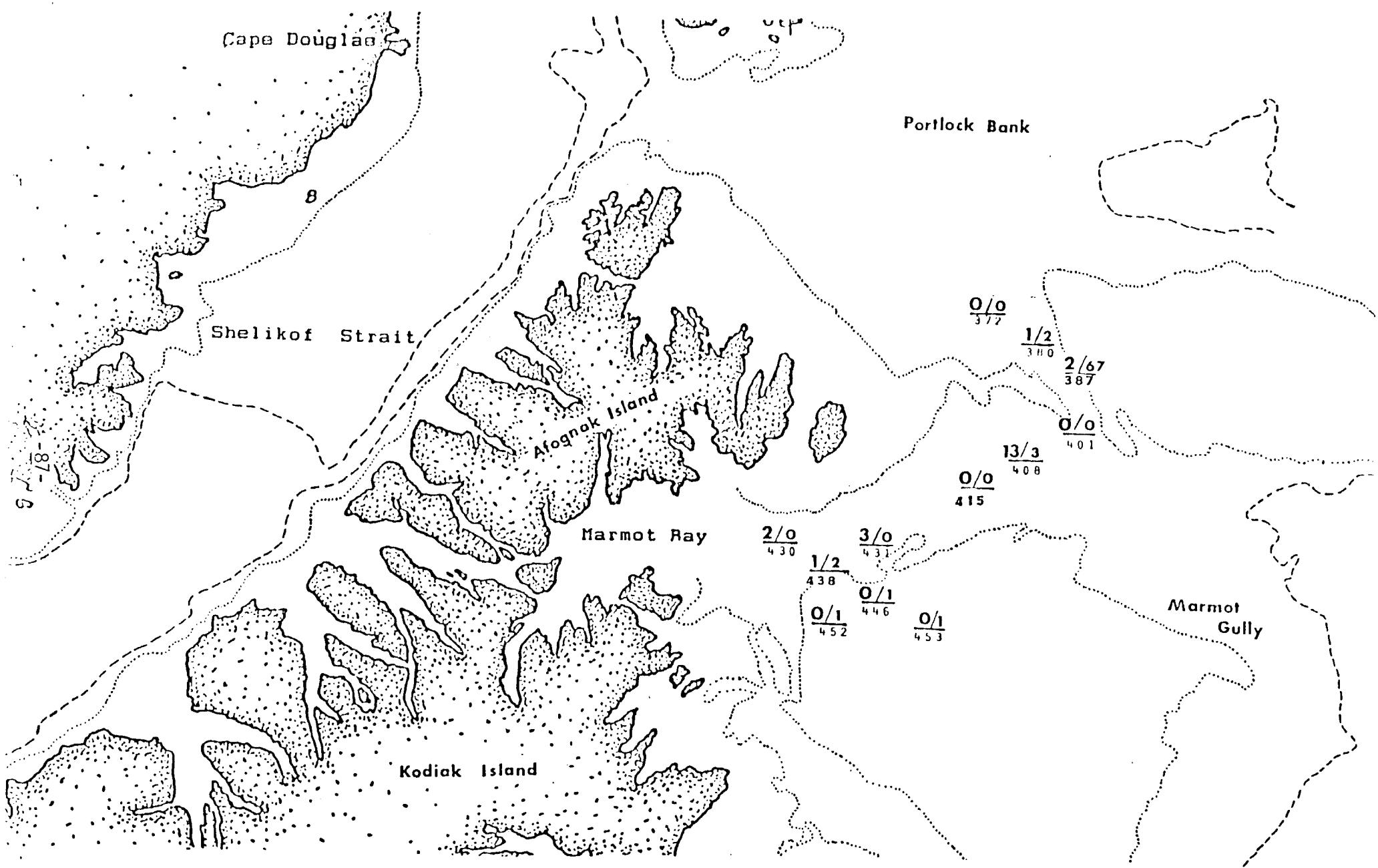


Figure 10b. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1973).

Presented as: Legal males/Adult females

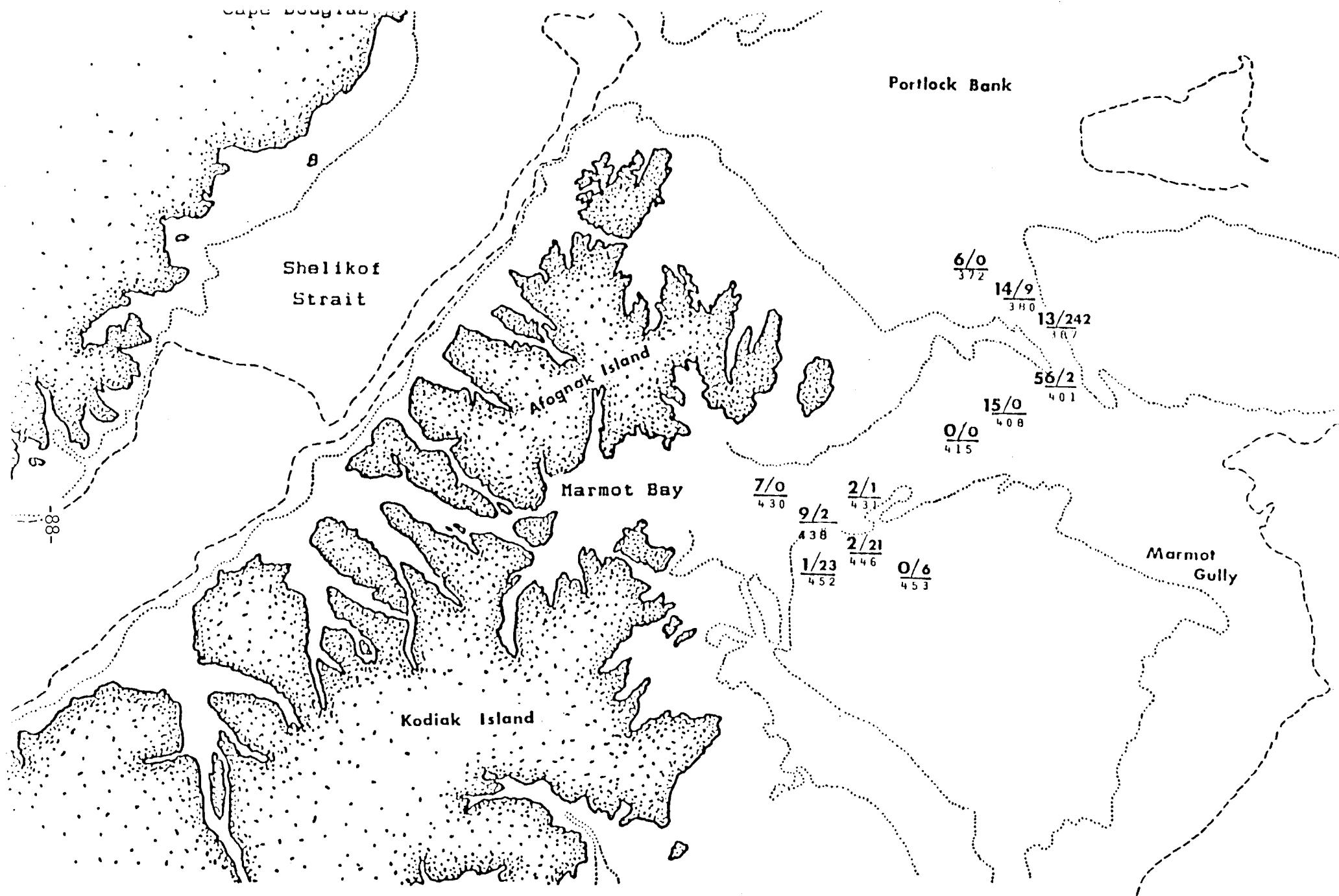


Figure 10 c. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1974).

Presented as: Legal males/Adult females

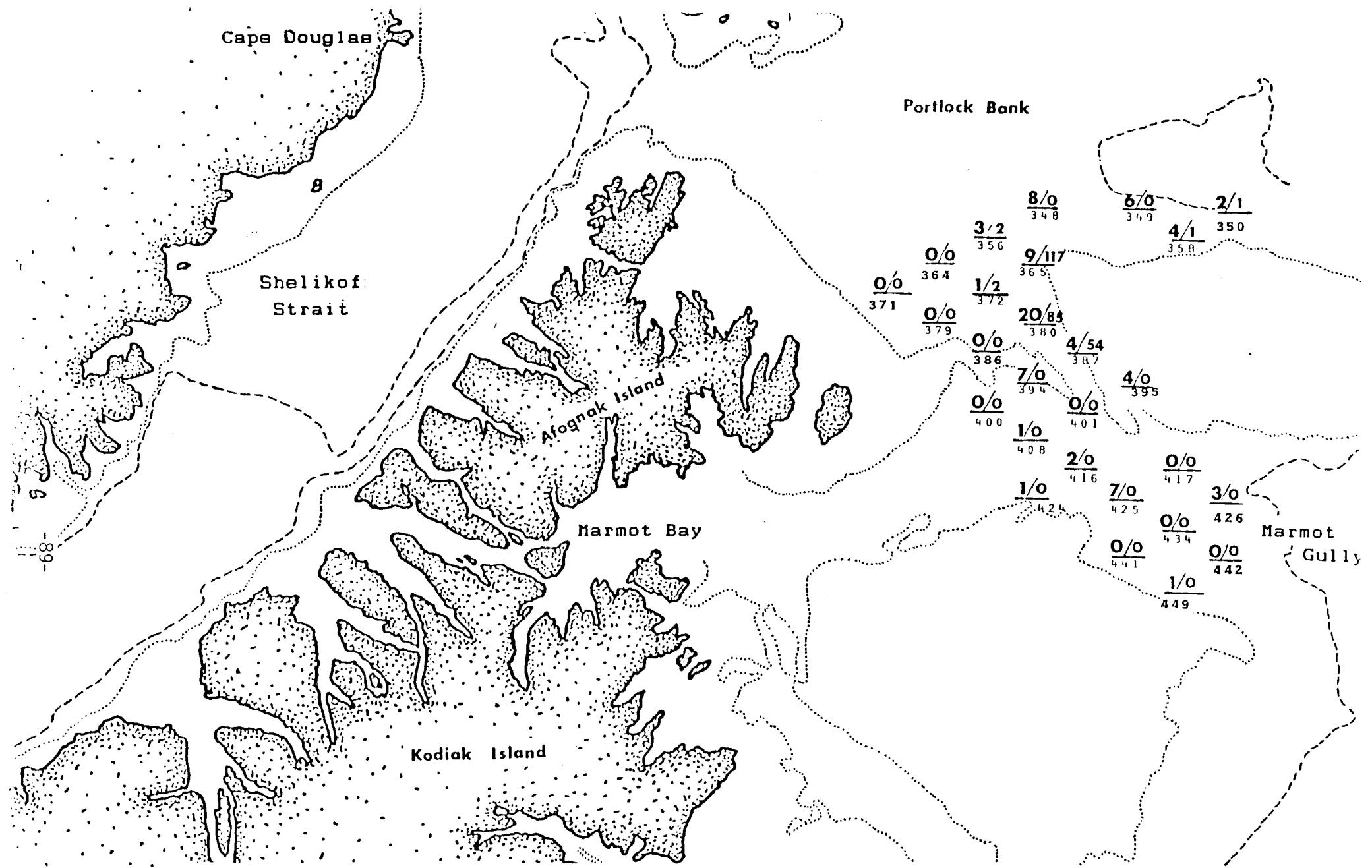


Figure 10d. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1975).

Presented as: Legal males/Adult females

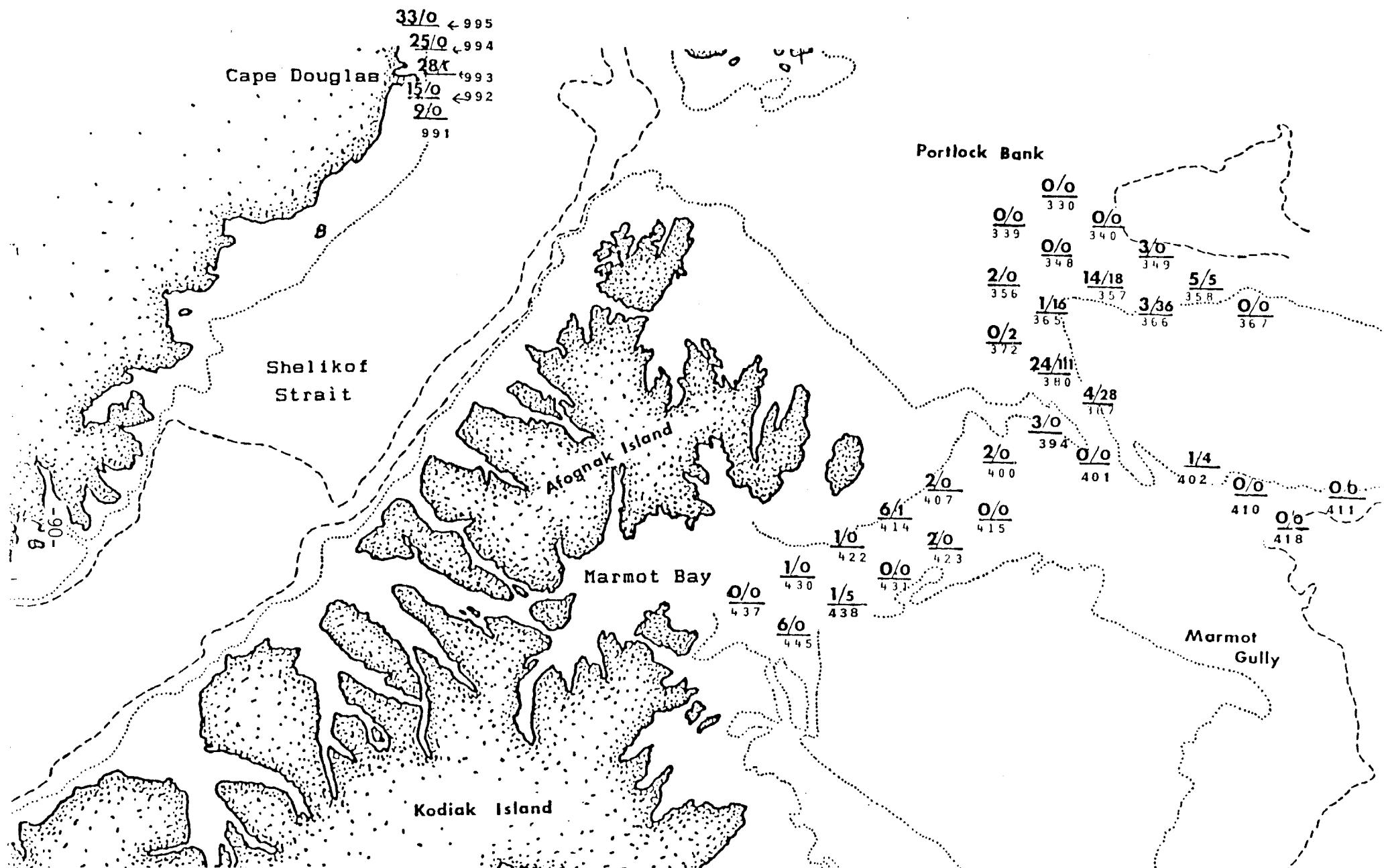


Figure 10e. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1976).

Presented as: Legal males/Adult females

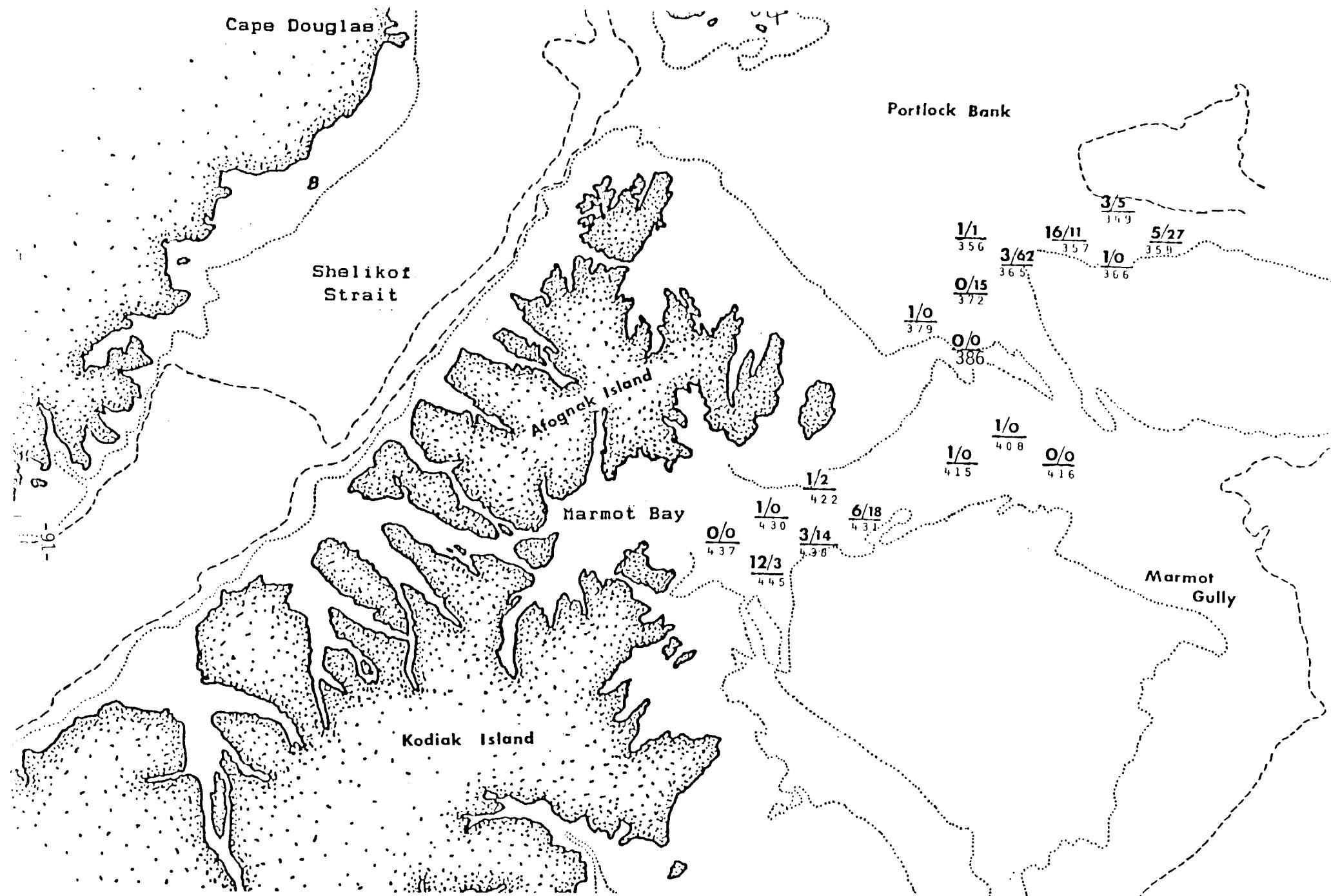


Figure 10f. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1977).

Presented as: Legal males/Adult females

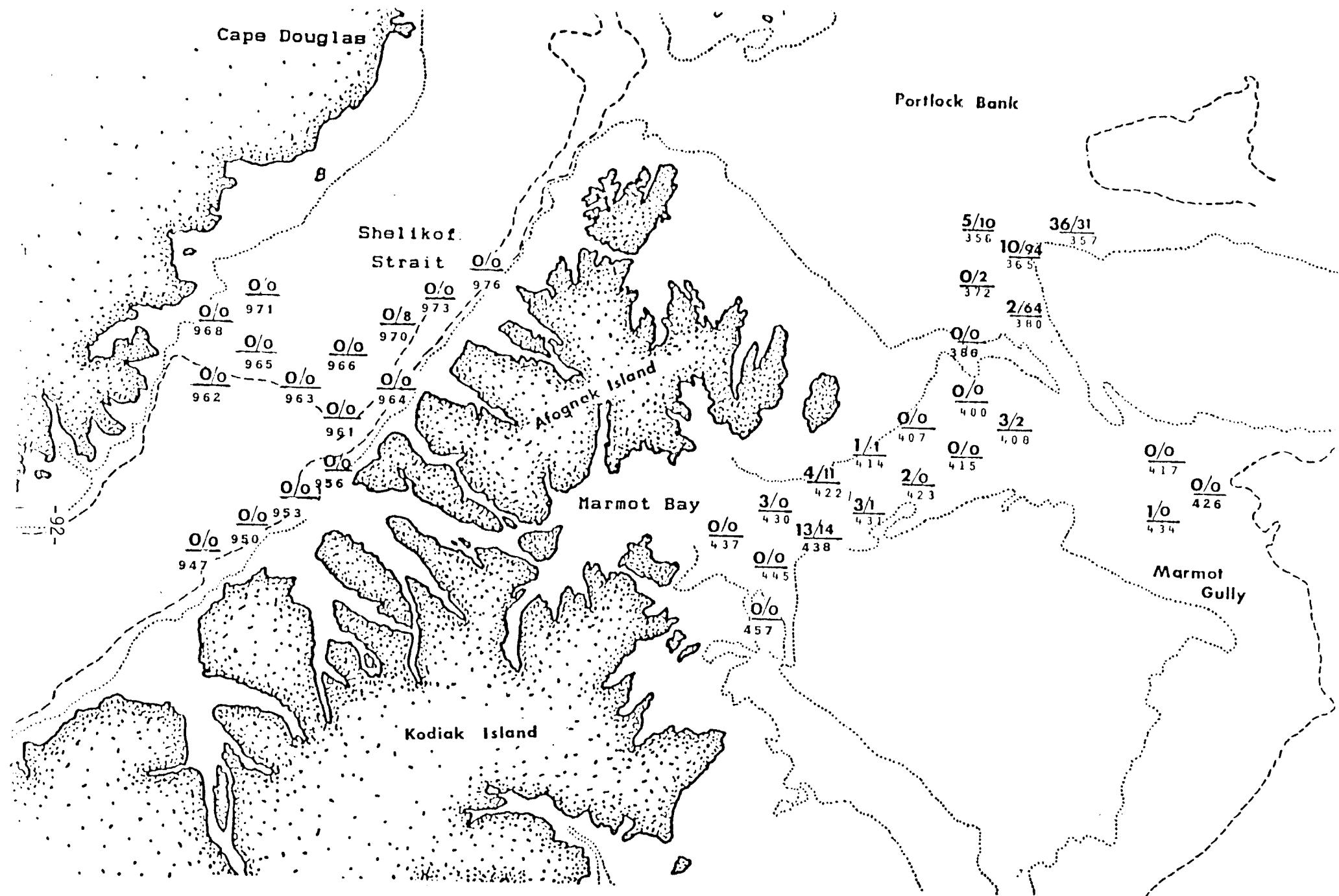


Figure 10g. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1979).

Presented as: Legal males/Adult females

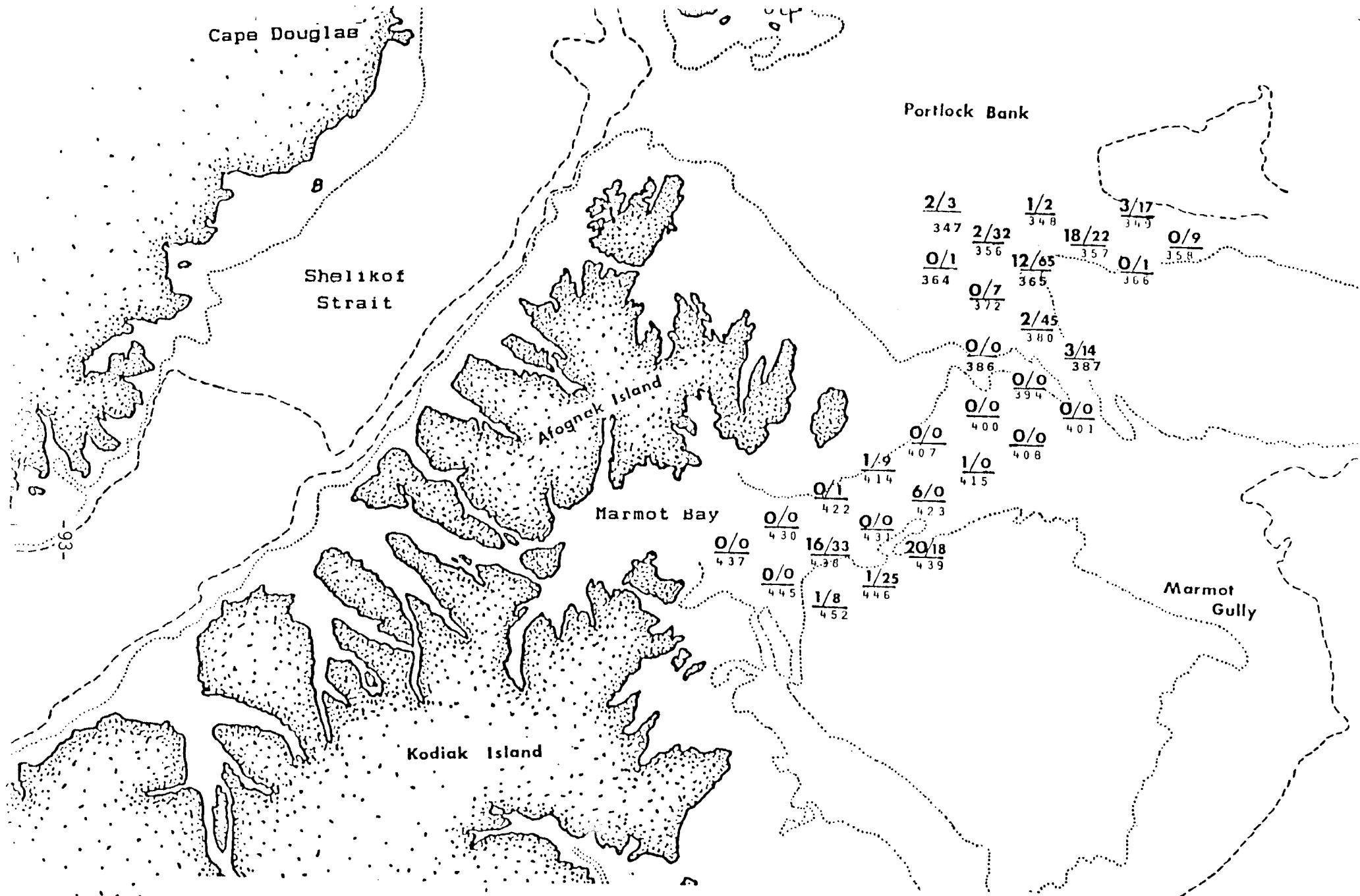


Figure 10h. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1980).

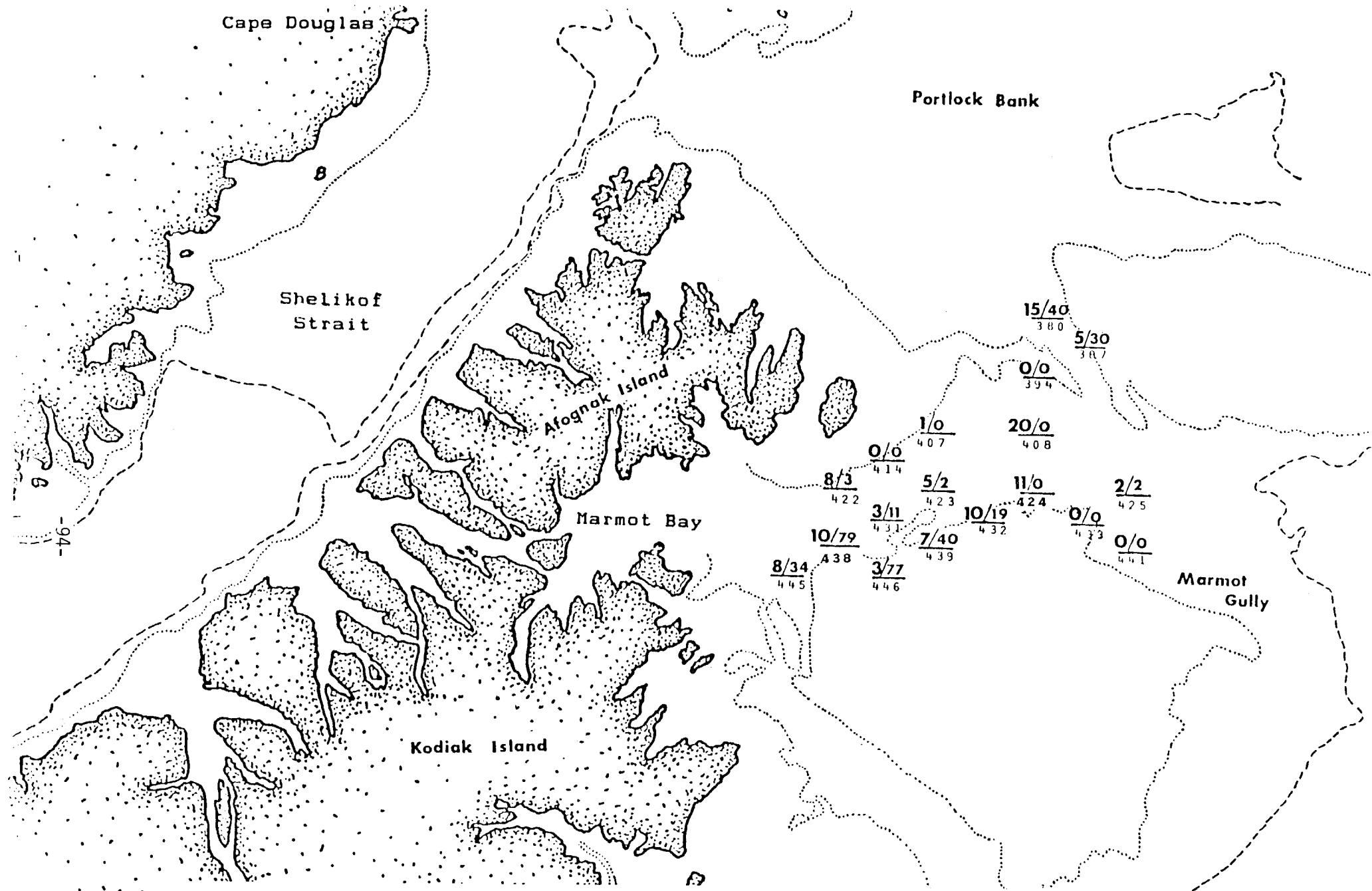


Figure 10i. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1981).

Presented as: Legal males/Adult females

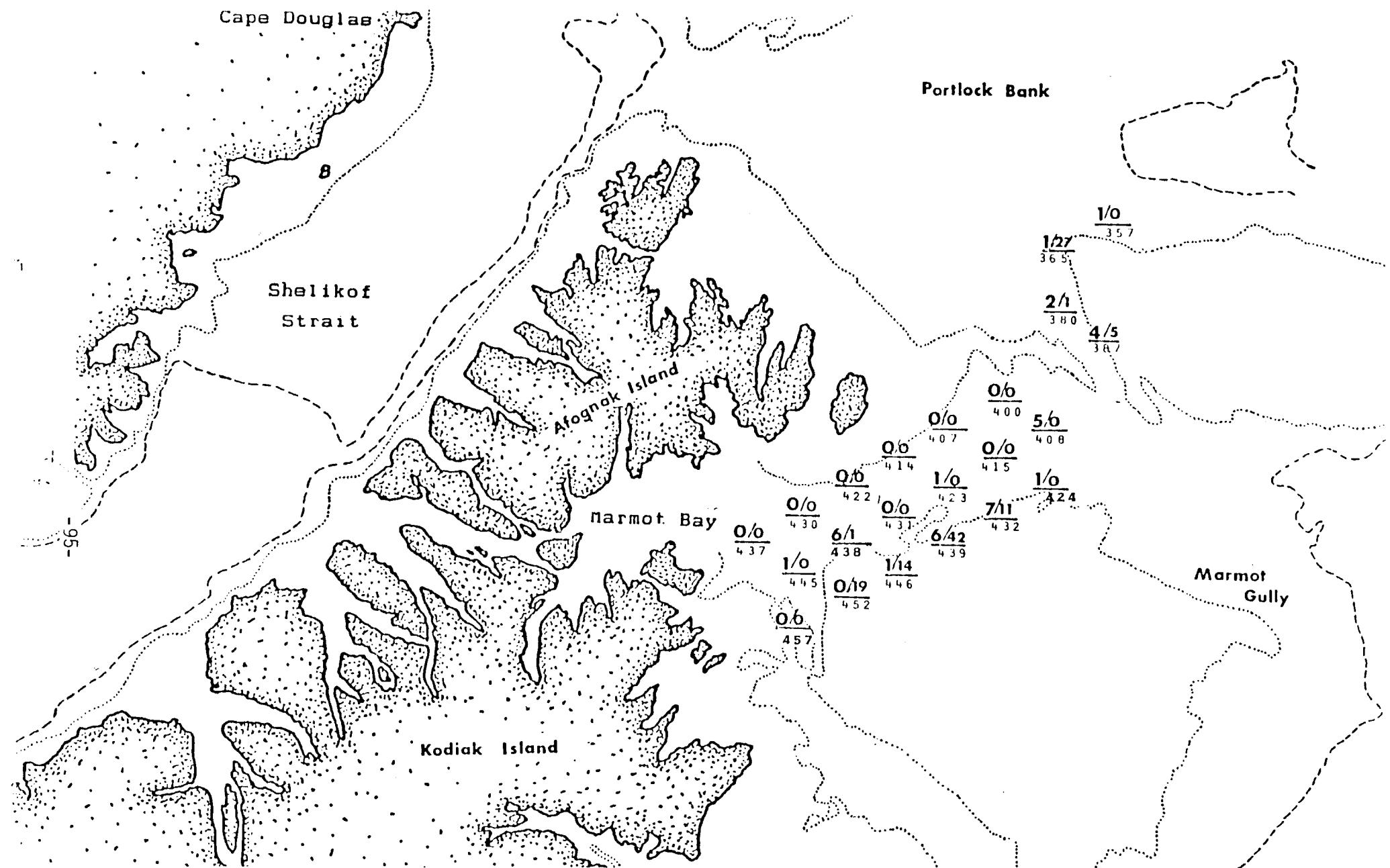


Figure 10j. Highest average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1982).

Presented as: Legal males/Adult females

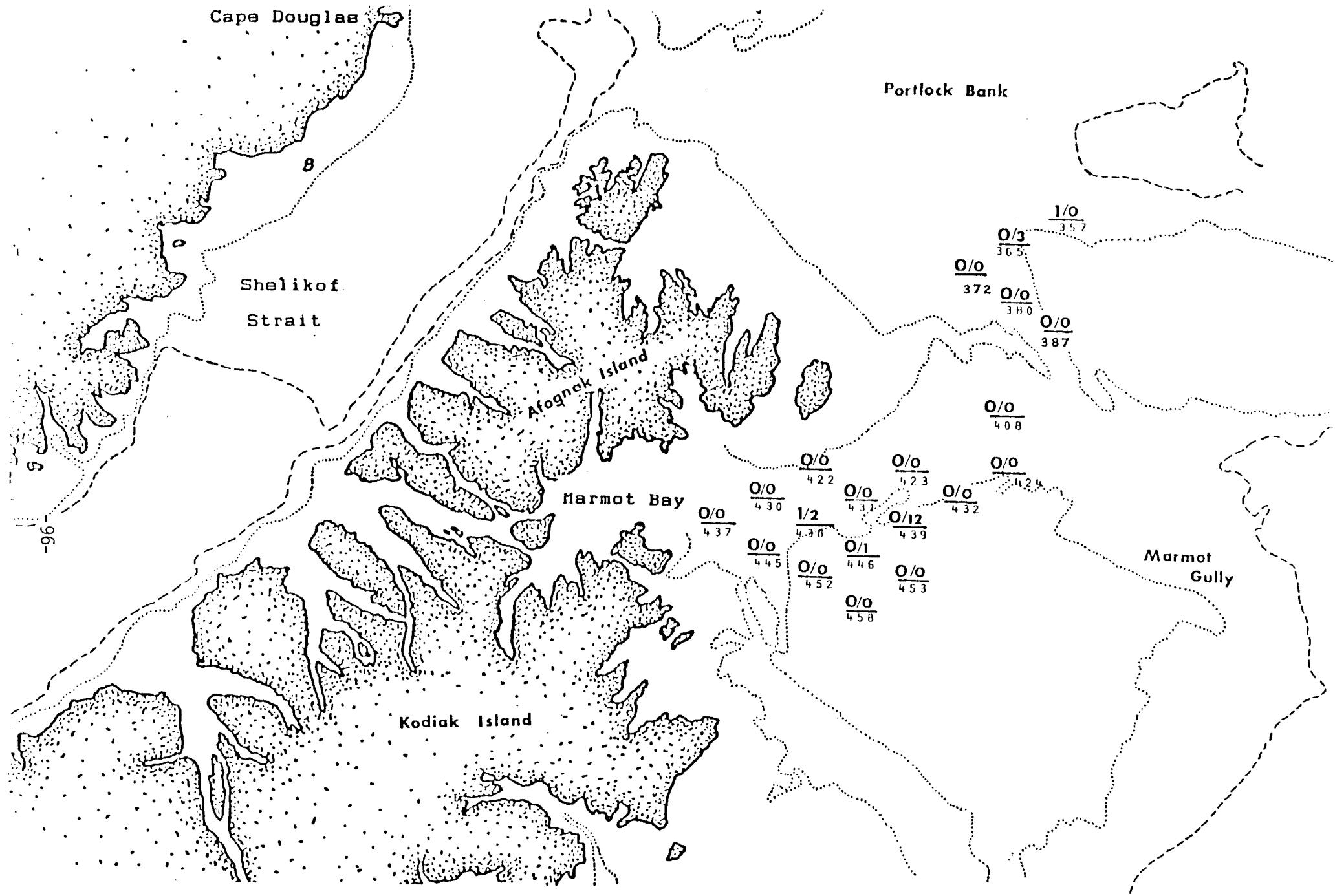


Figure 10k. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1983).

Presented as: Legal males/Adult females

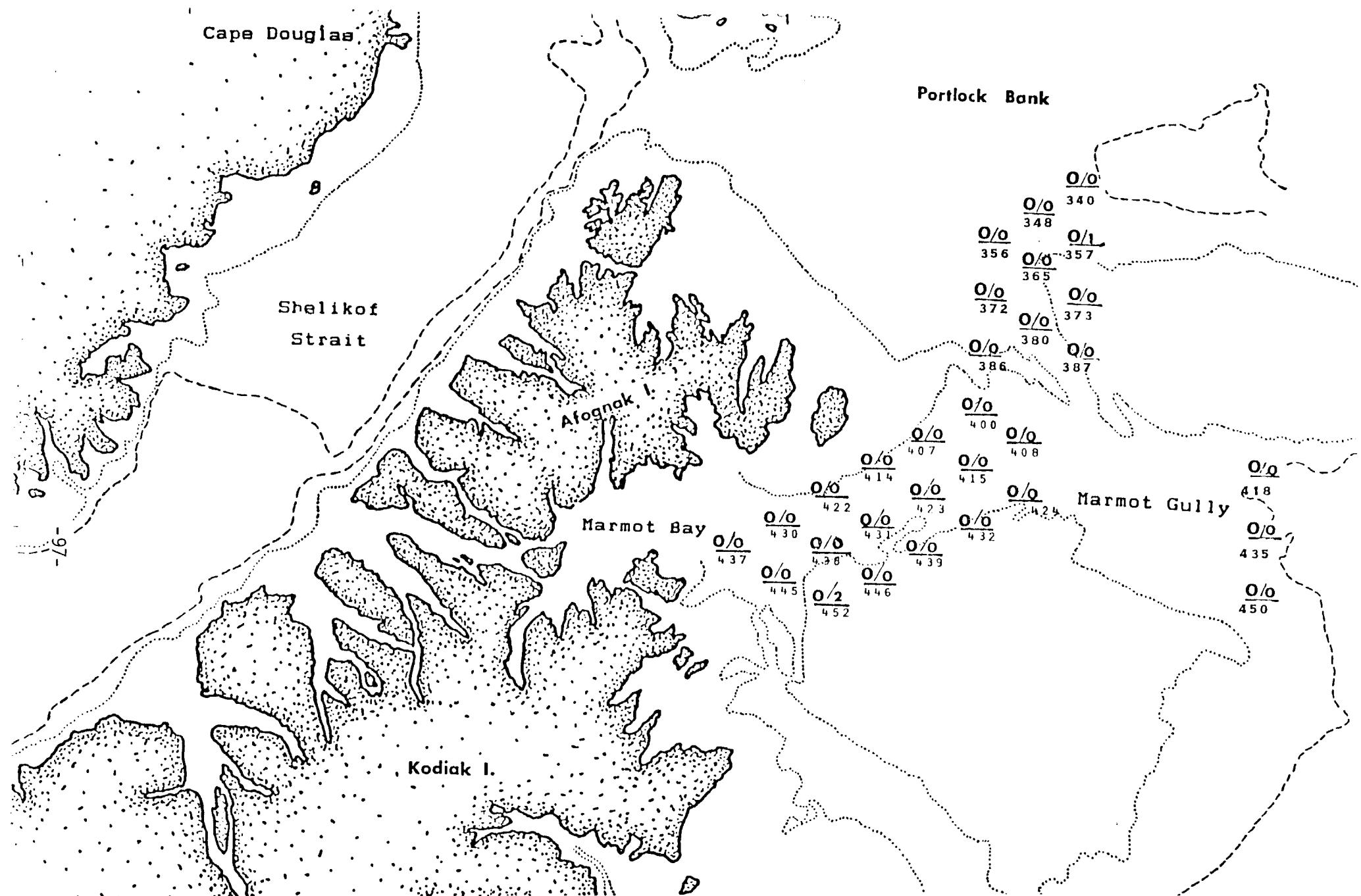


Figure 10L Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1984).

Presented as: Legal males/Adult females

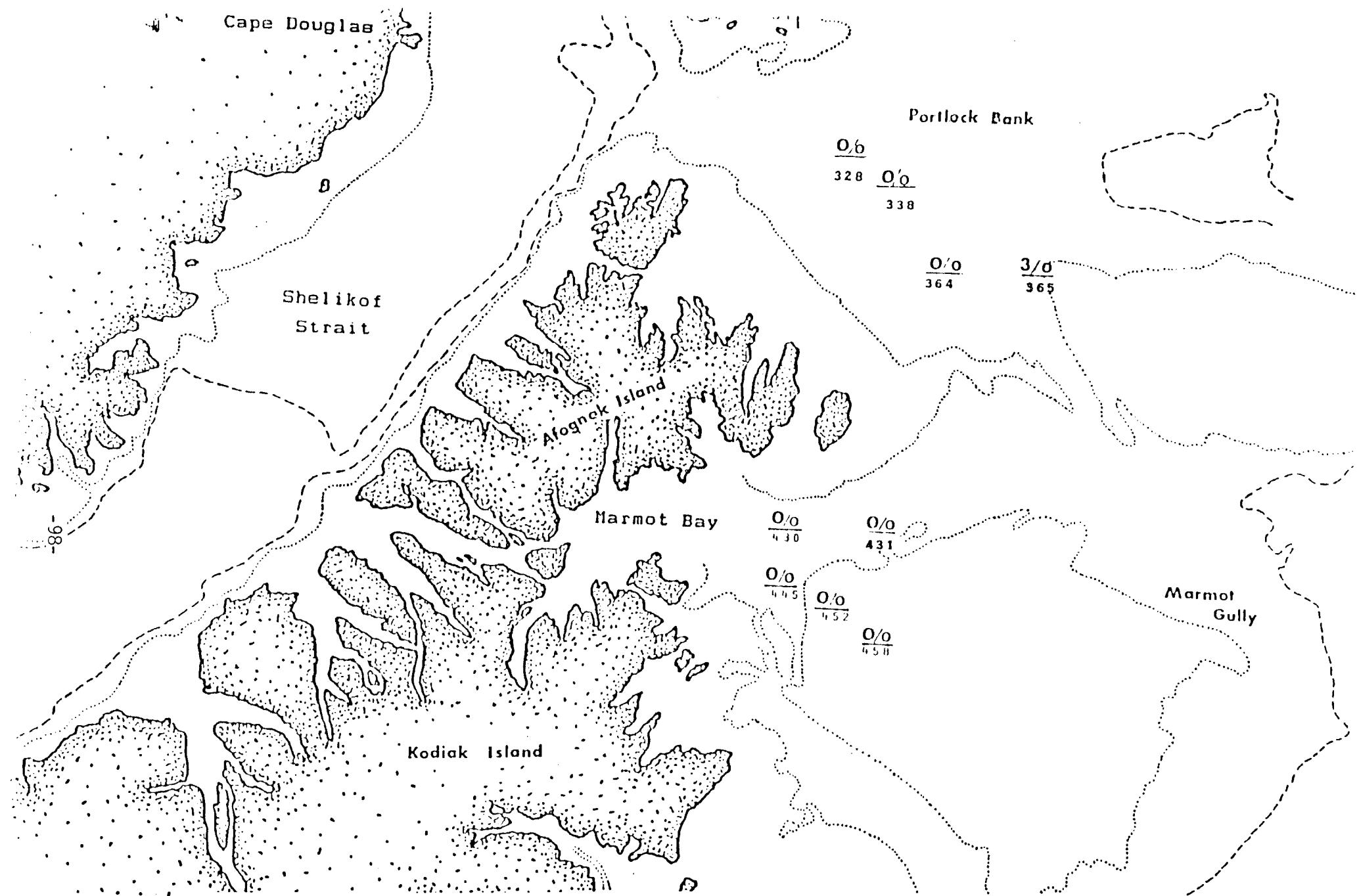


Figure 11a. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1972).

Presented as: 1's + 2's/3's + 4's

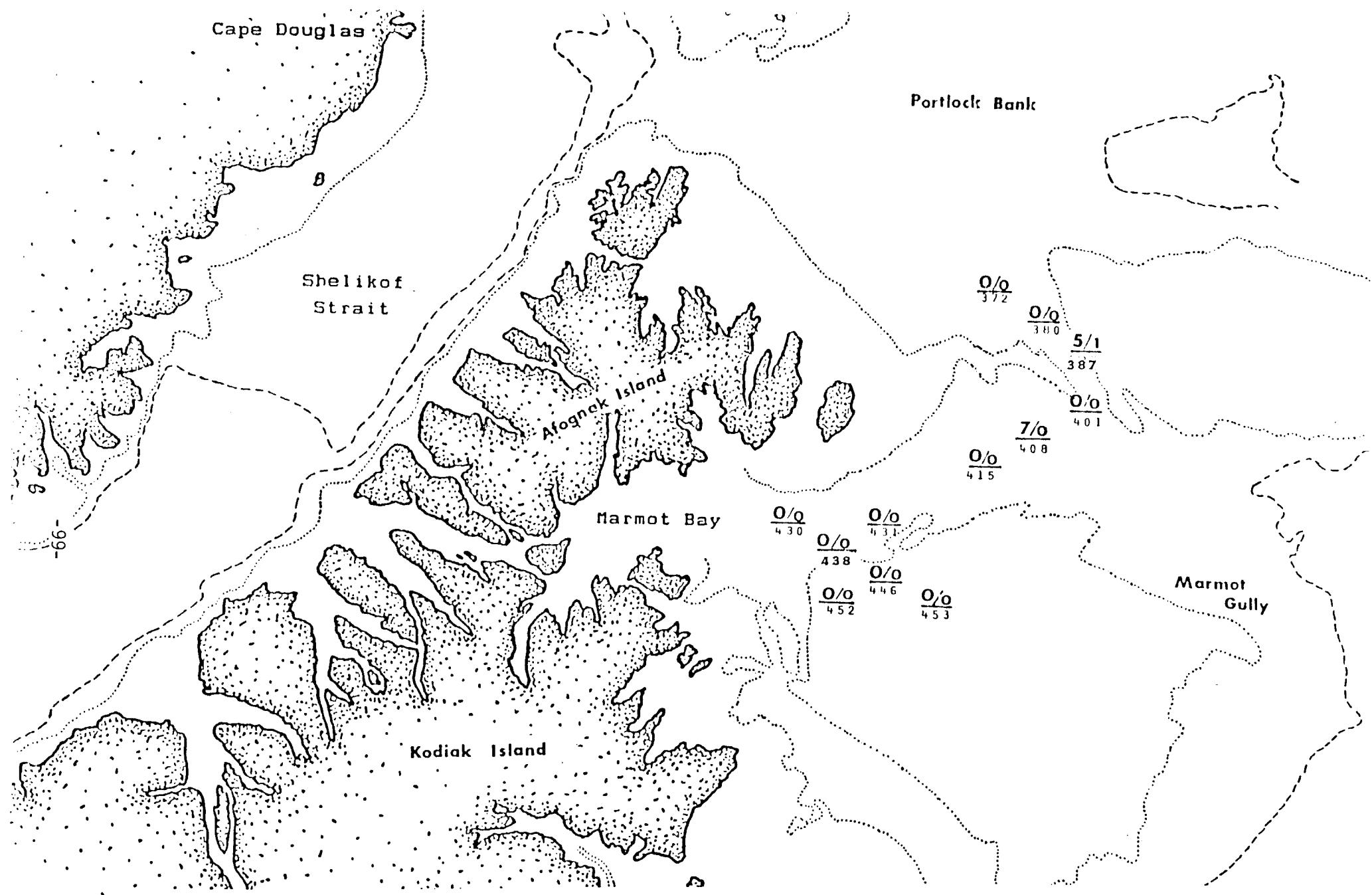


Figure 11b. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1973).

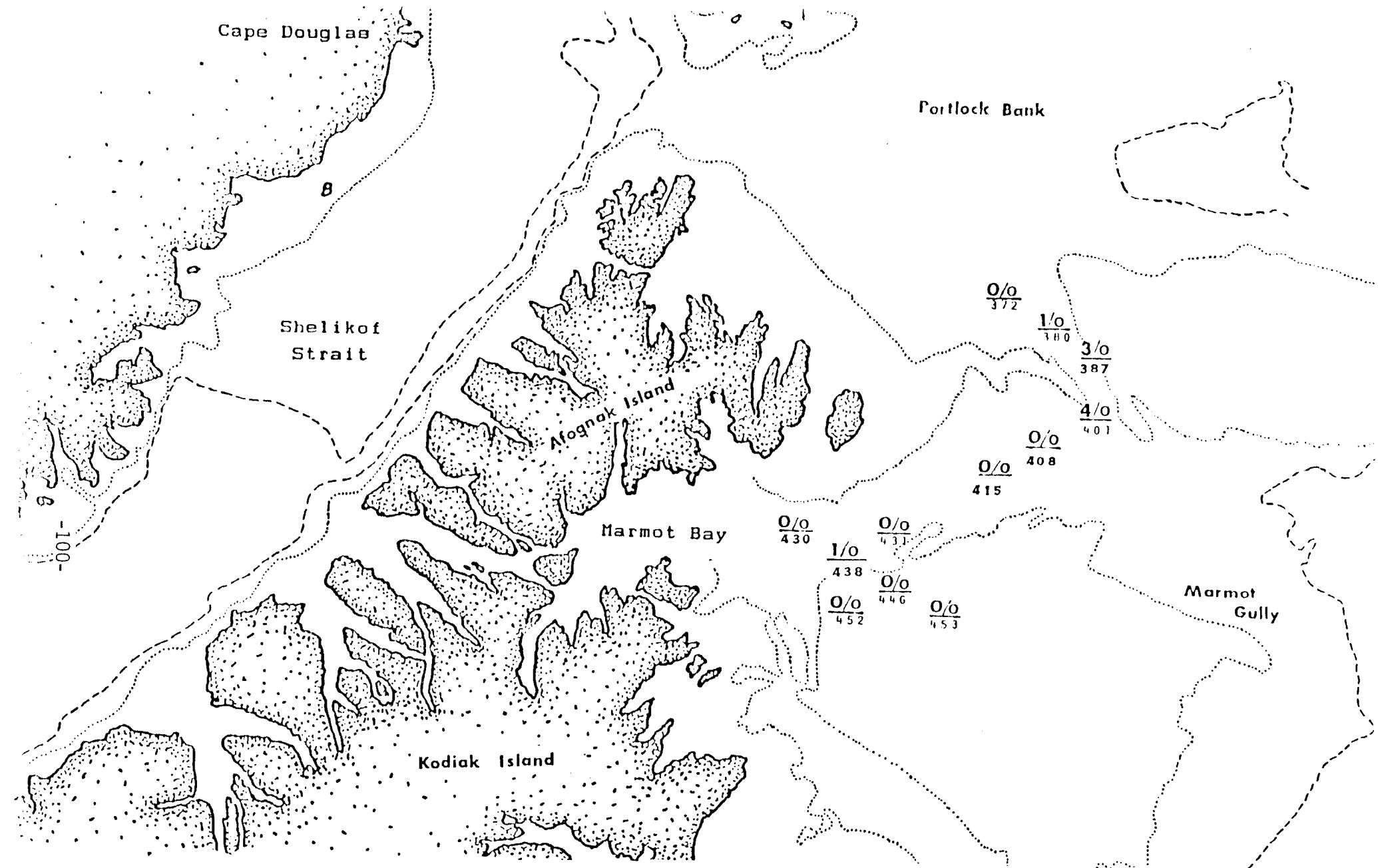


Figure 11c. Average standardized number of prae-recruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1974).

Presented as: 1's + 2's/3's + 4's

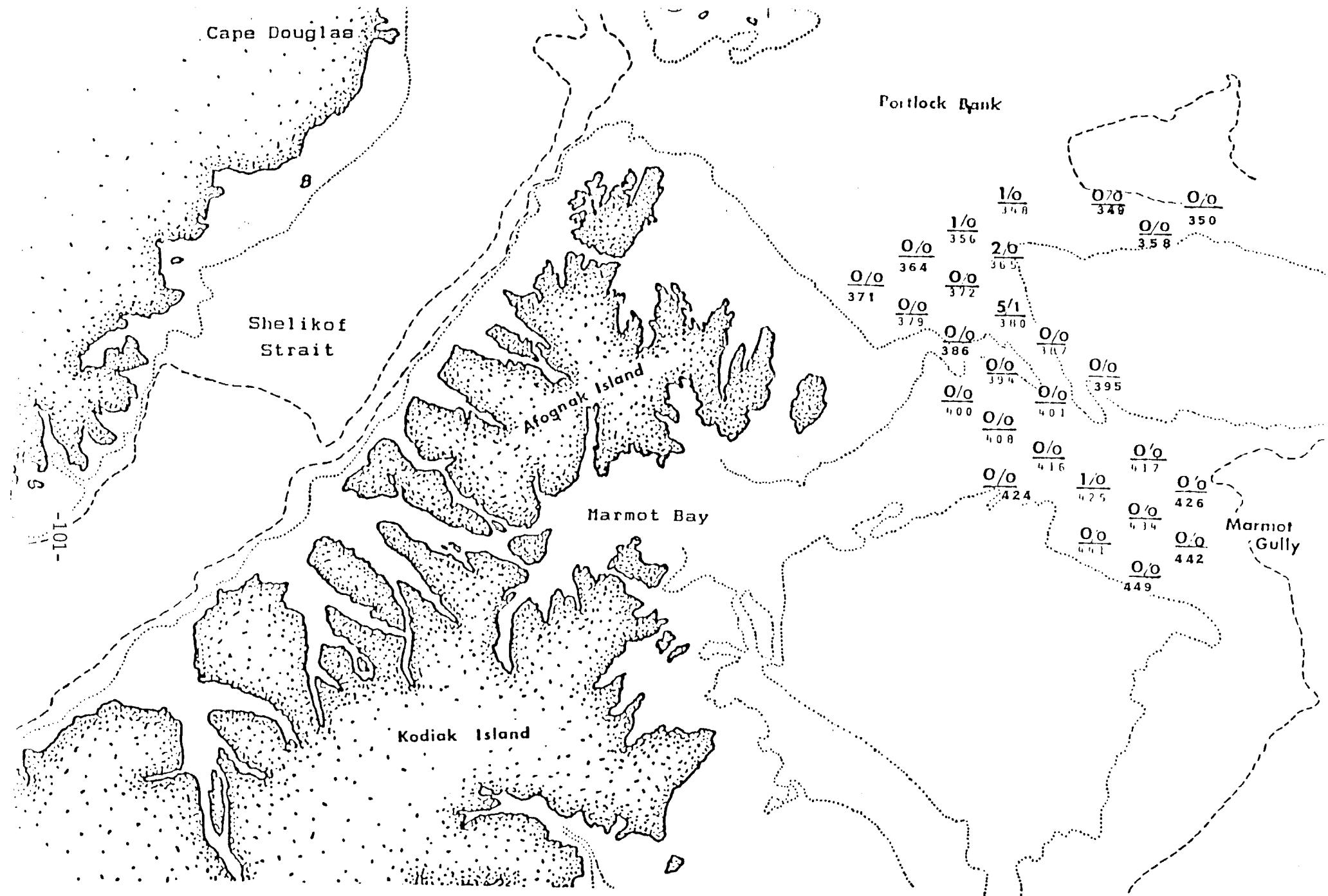


Figure 11d. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1975).

Presented as: 1's + 2's/3's + 4's

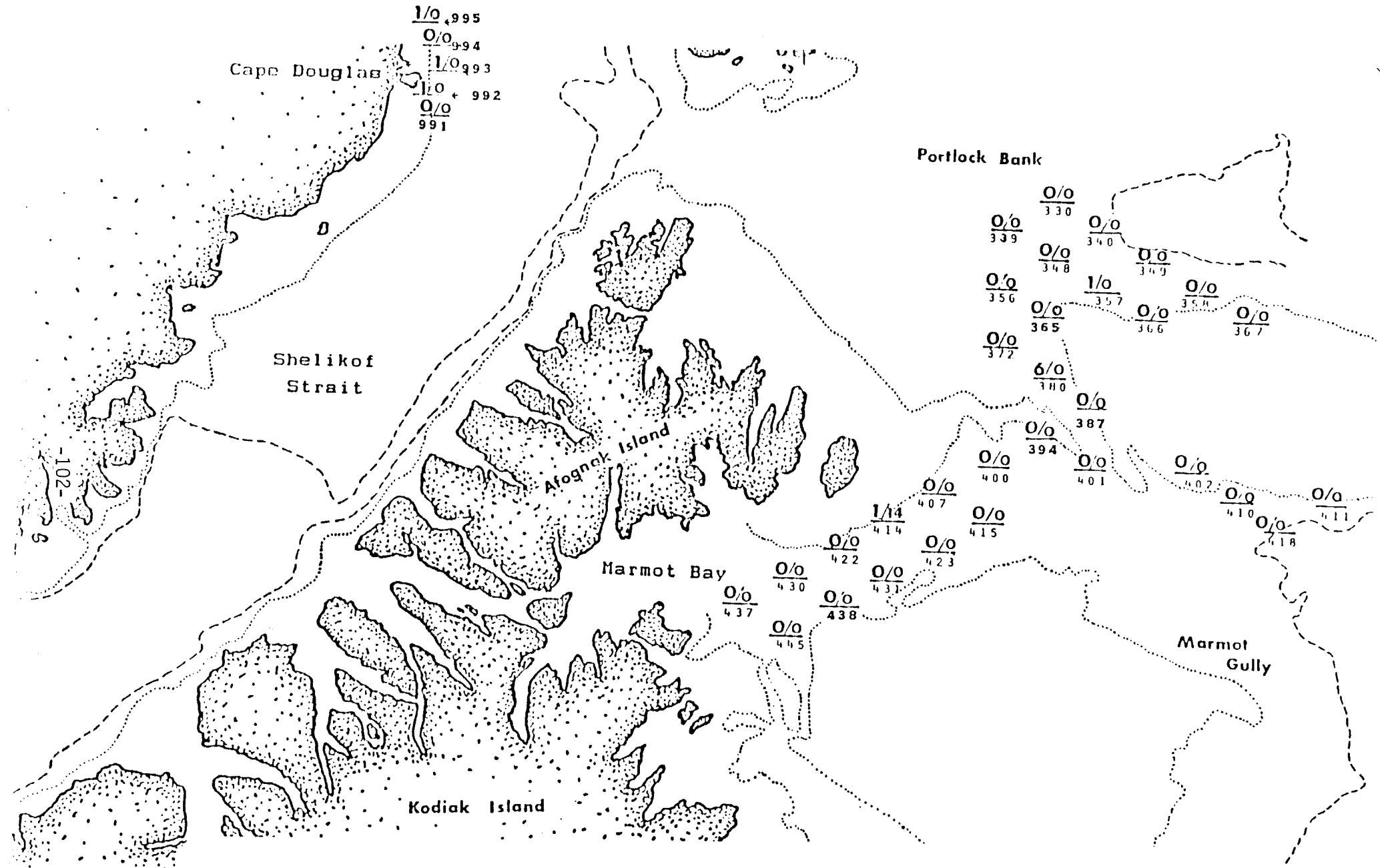


Figure 11e. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1976).

Presented as: 1's + 2's/3's + 4's

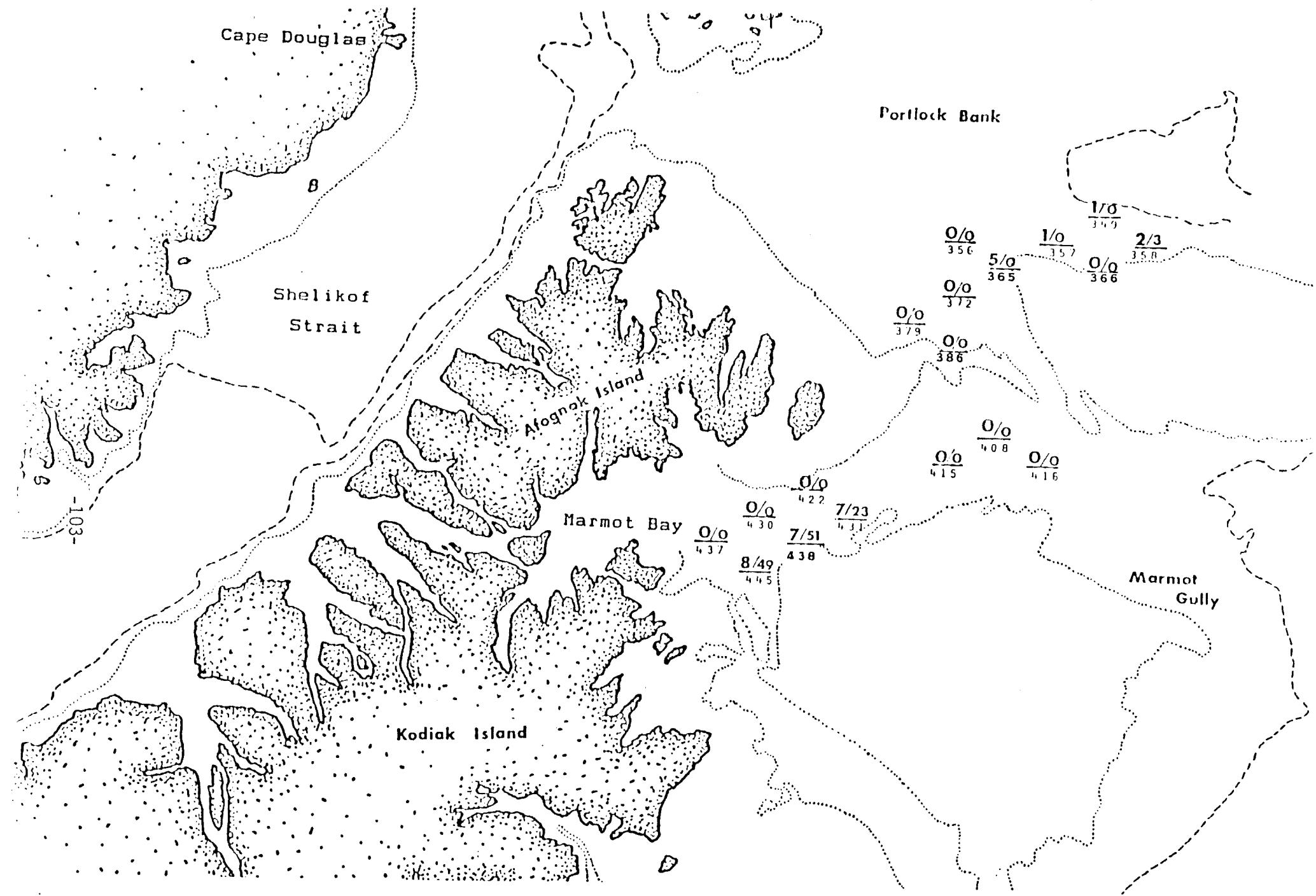


Figure 11f. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1977).

Presented as: 1's + 2's/3's + 4's

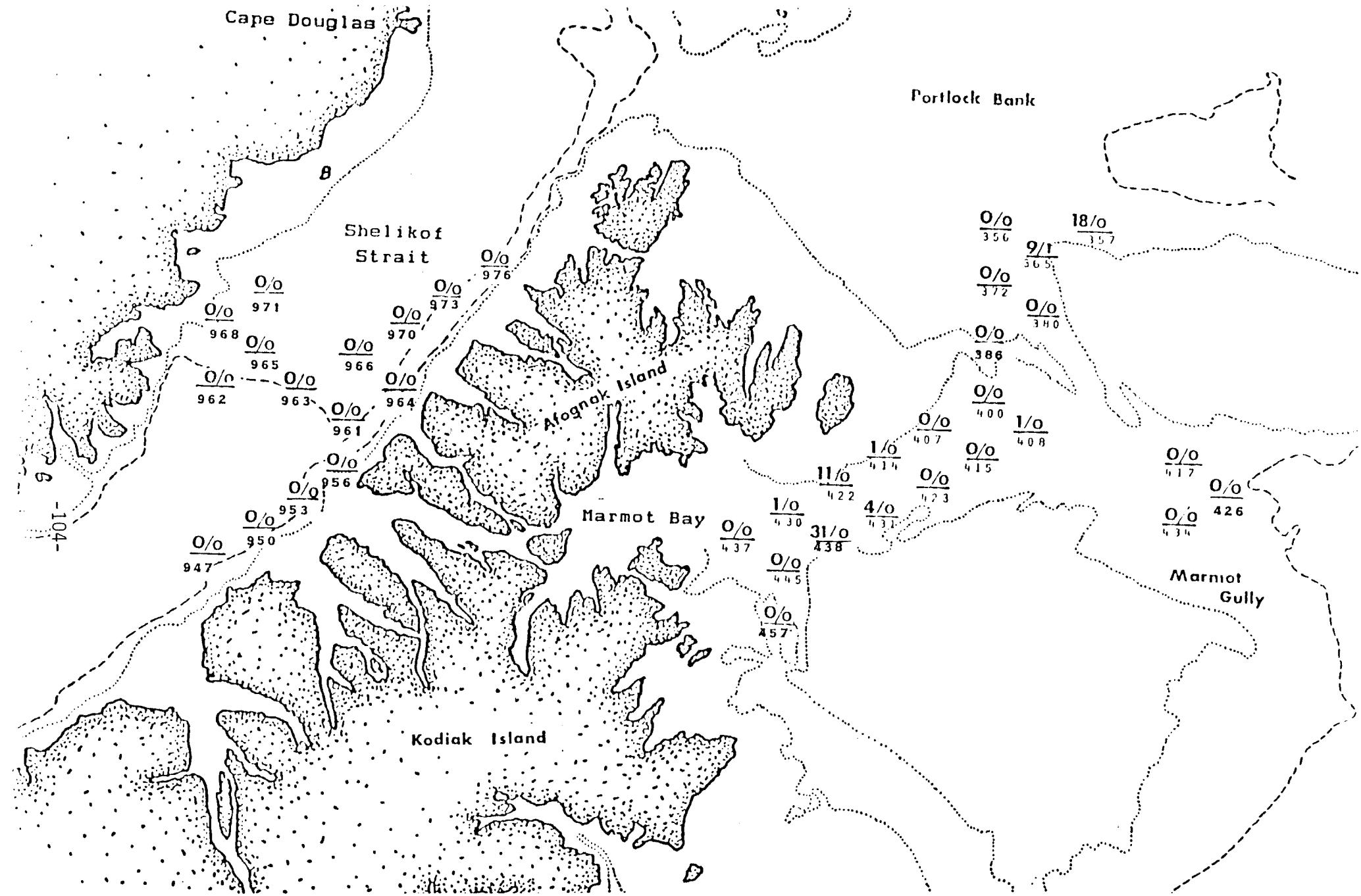


Figure 11g. Average standardized number of prae-recruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1979).

Presented as: 1's + 2's/3's + 4's

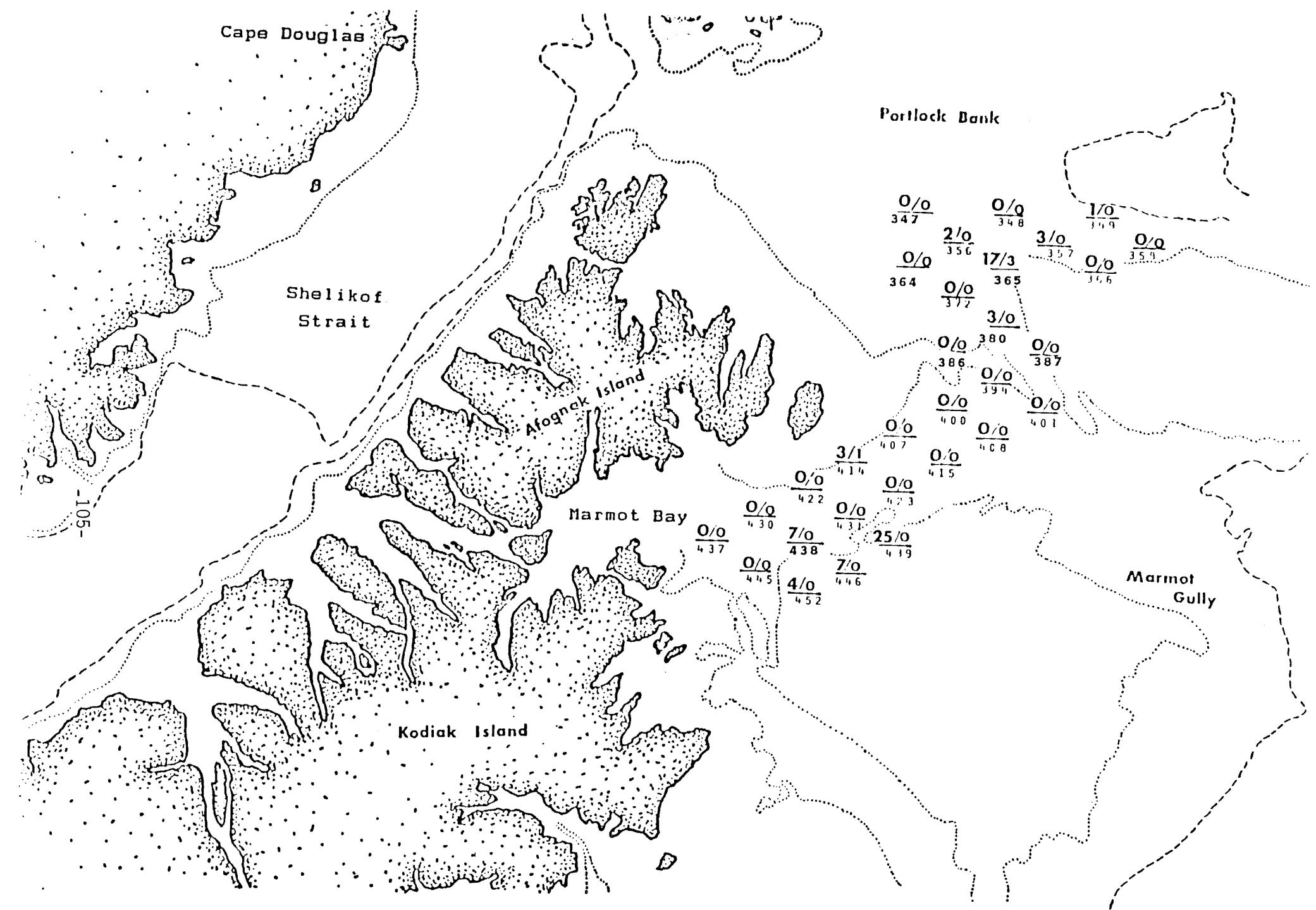


Figure 11h. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1980).

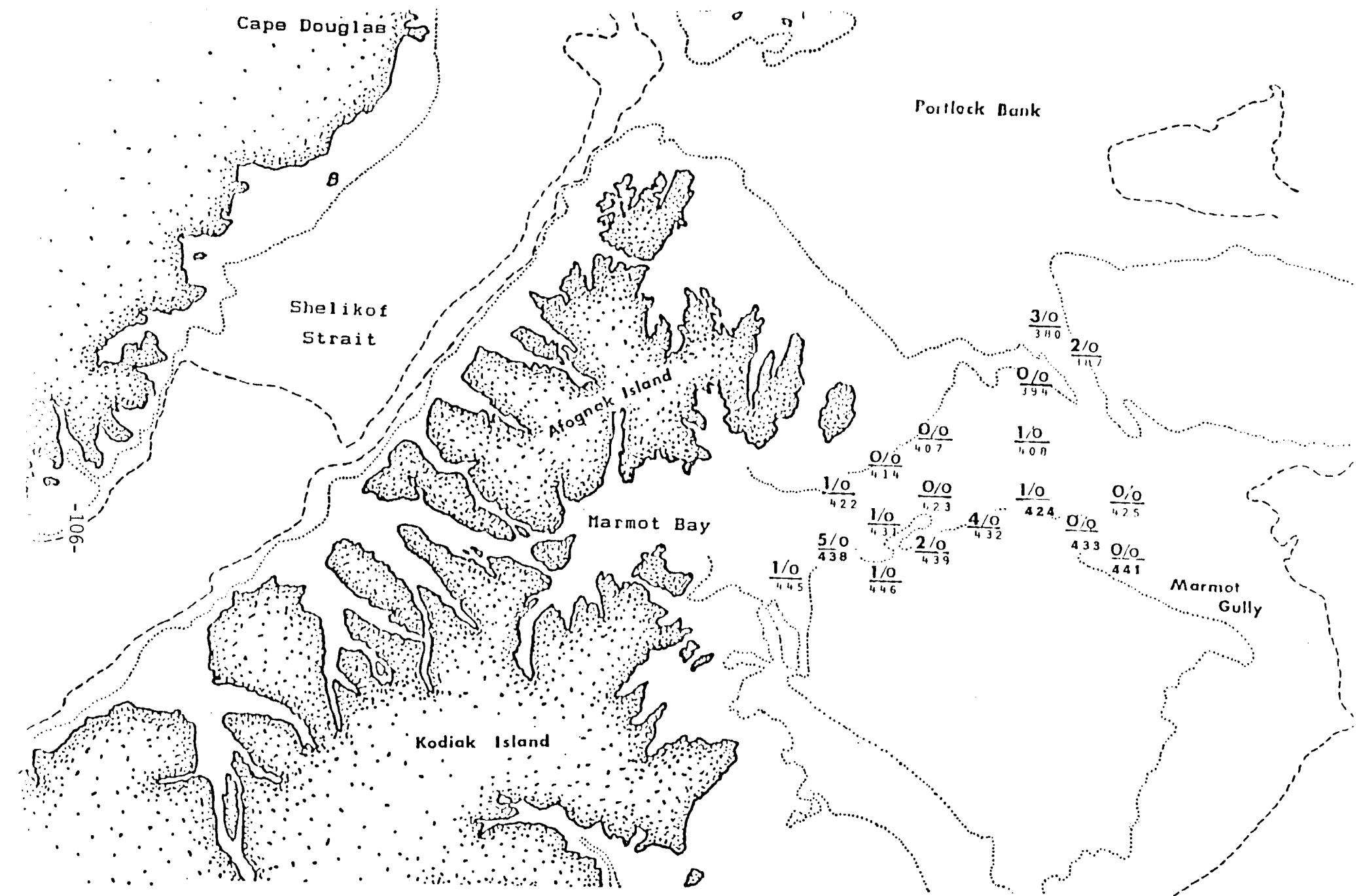


Figure 11i. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1981).

Presented as: 1's + 2's/3's + 4's

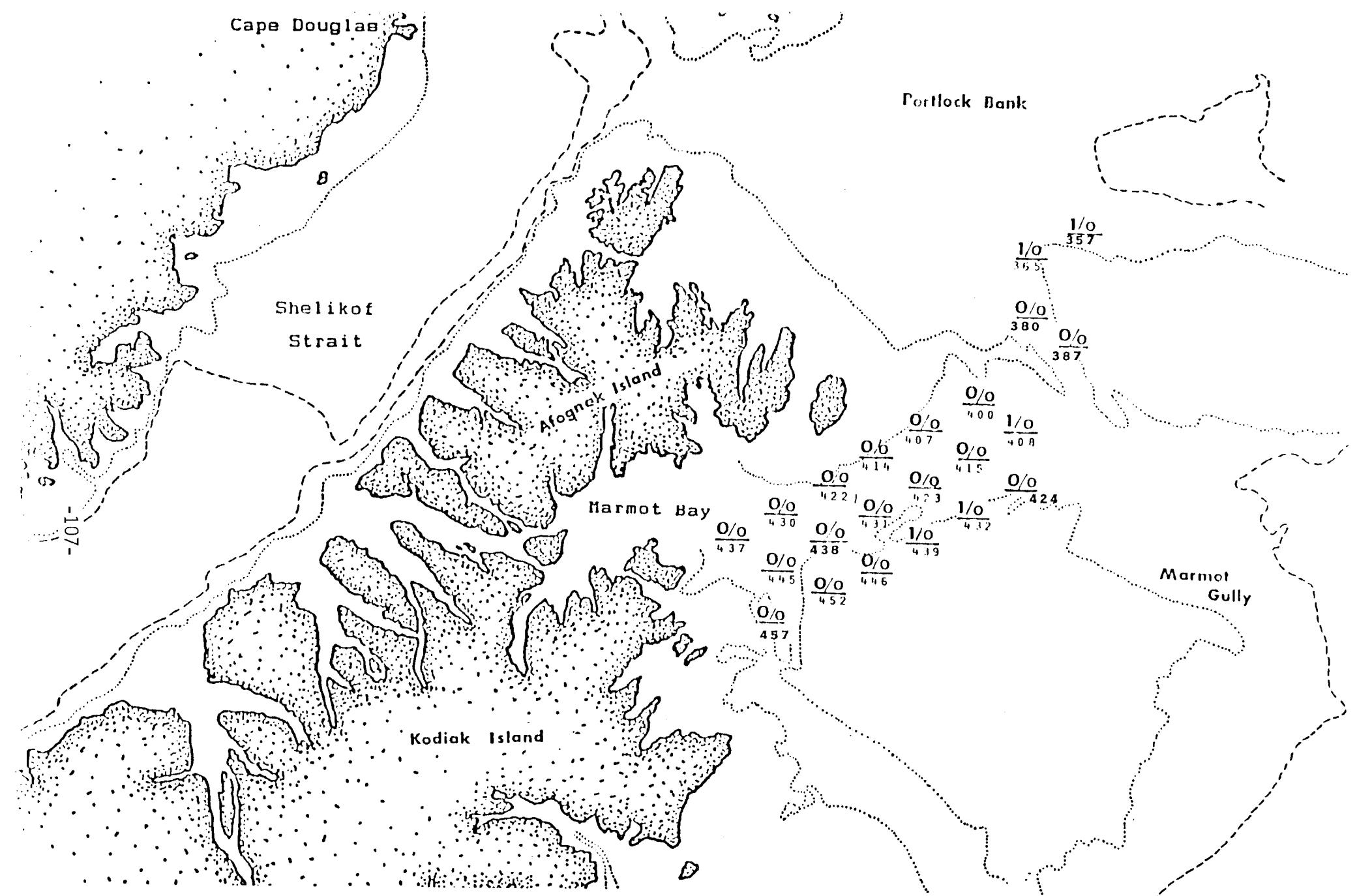


Figure 11j. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1982).

Presented as: 1's + 2's/3's + 4's

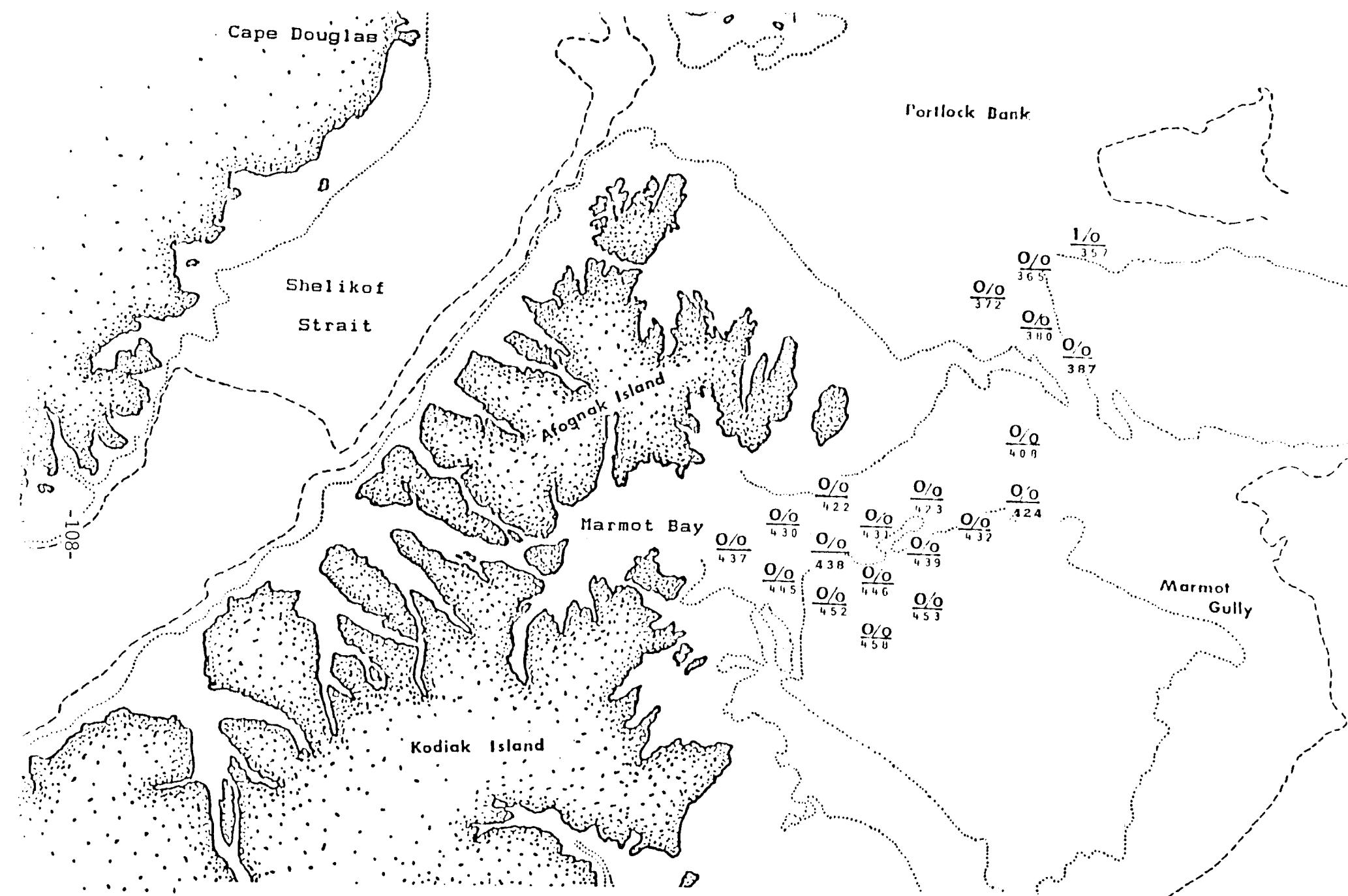


Figure 11k. Average standardized number of prae-recruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1983).

Presented as: 1's + 2's/3's + 4's

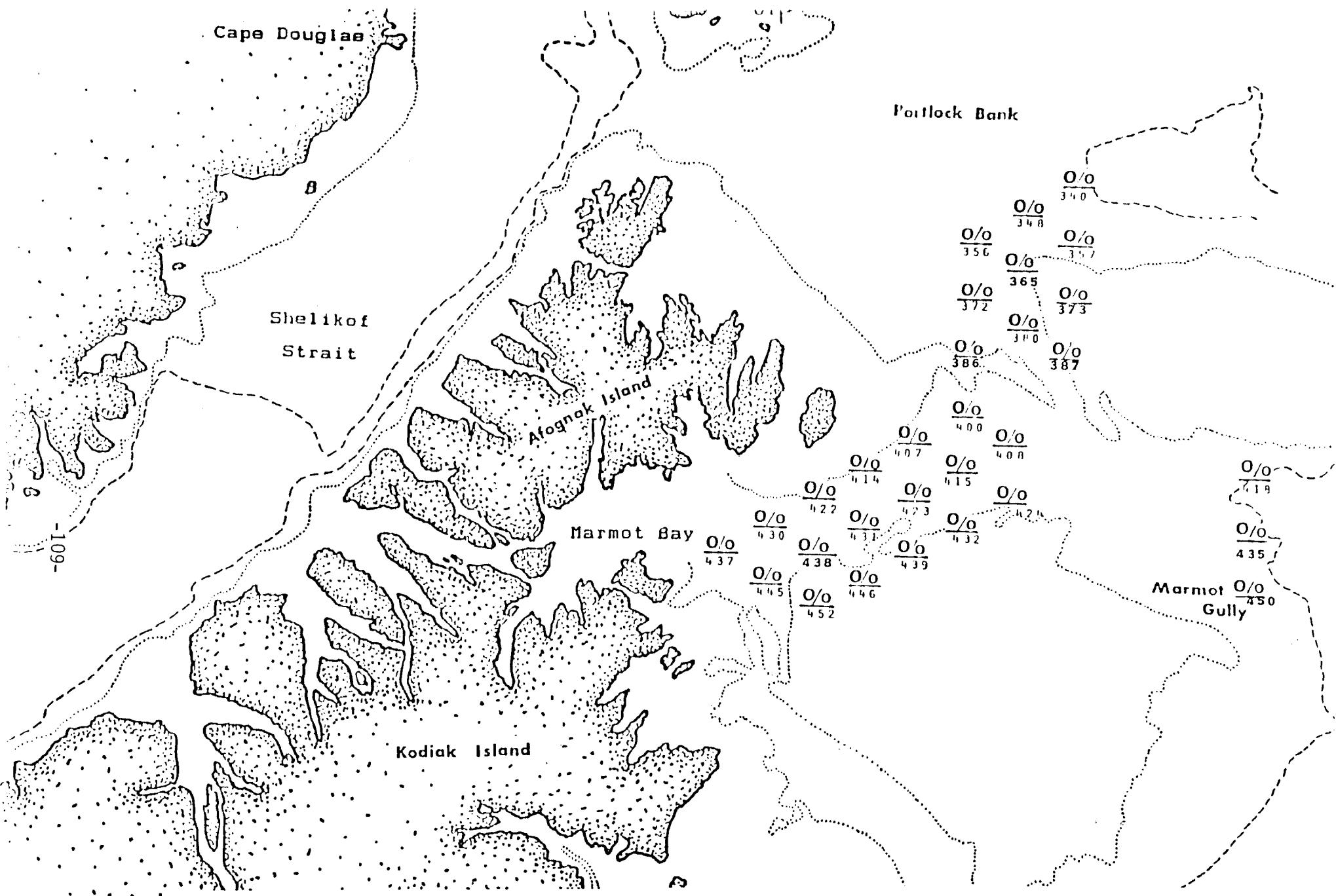


Figure 111. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1984).

Presented as: 1's + 2's/3's + 4's

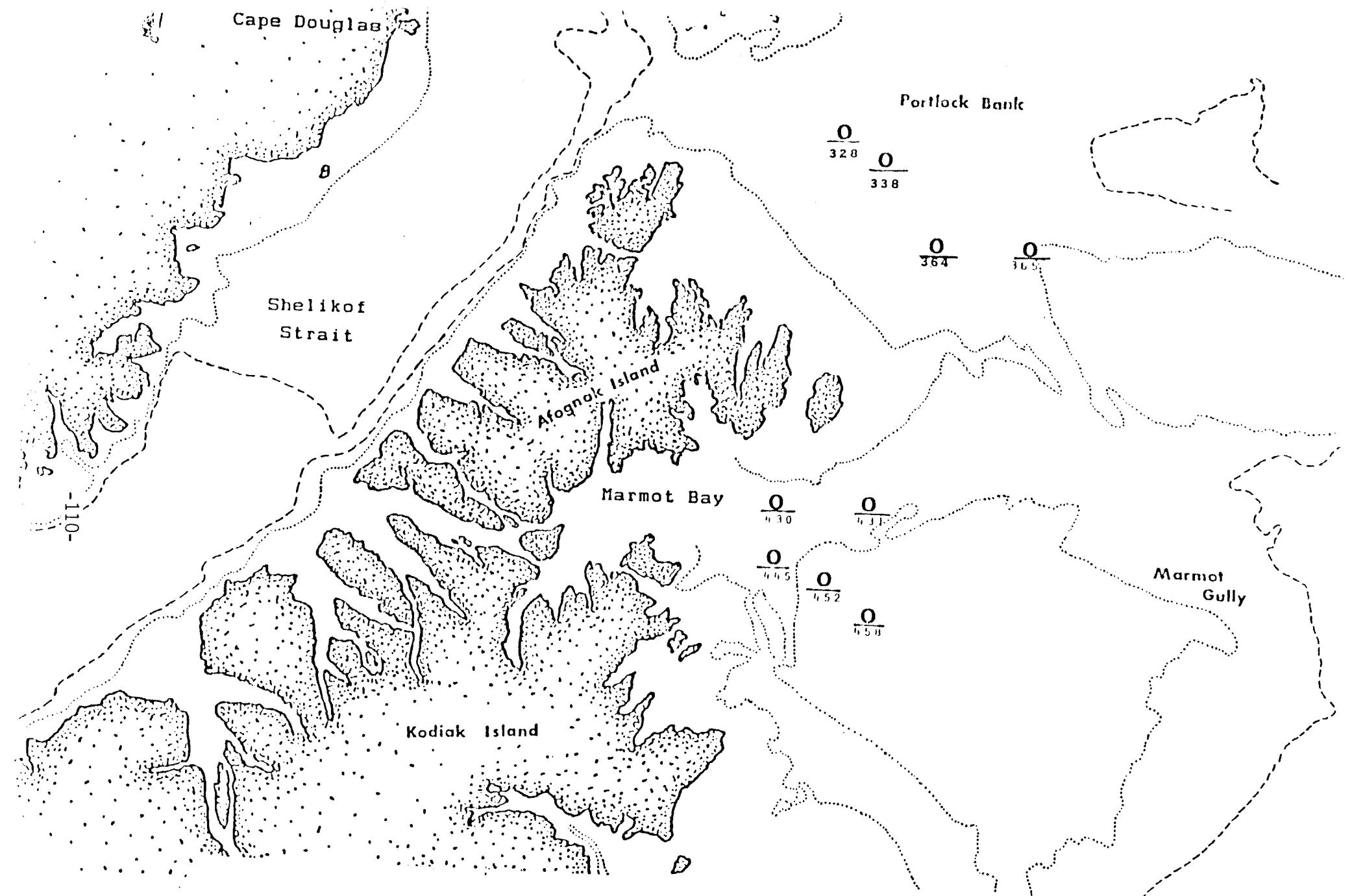


Figure 12a. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1972).

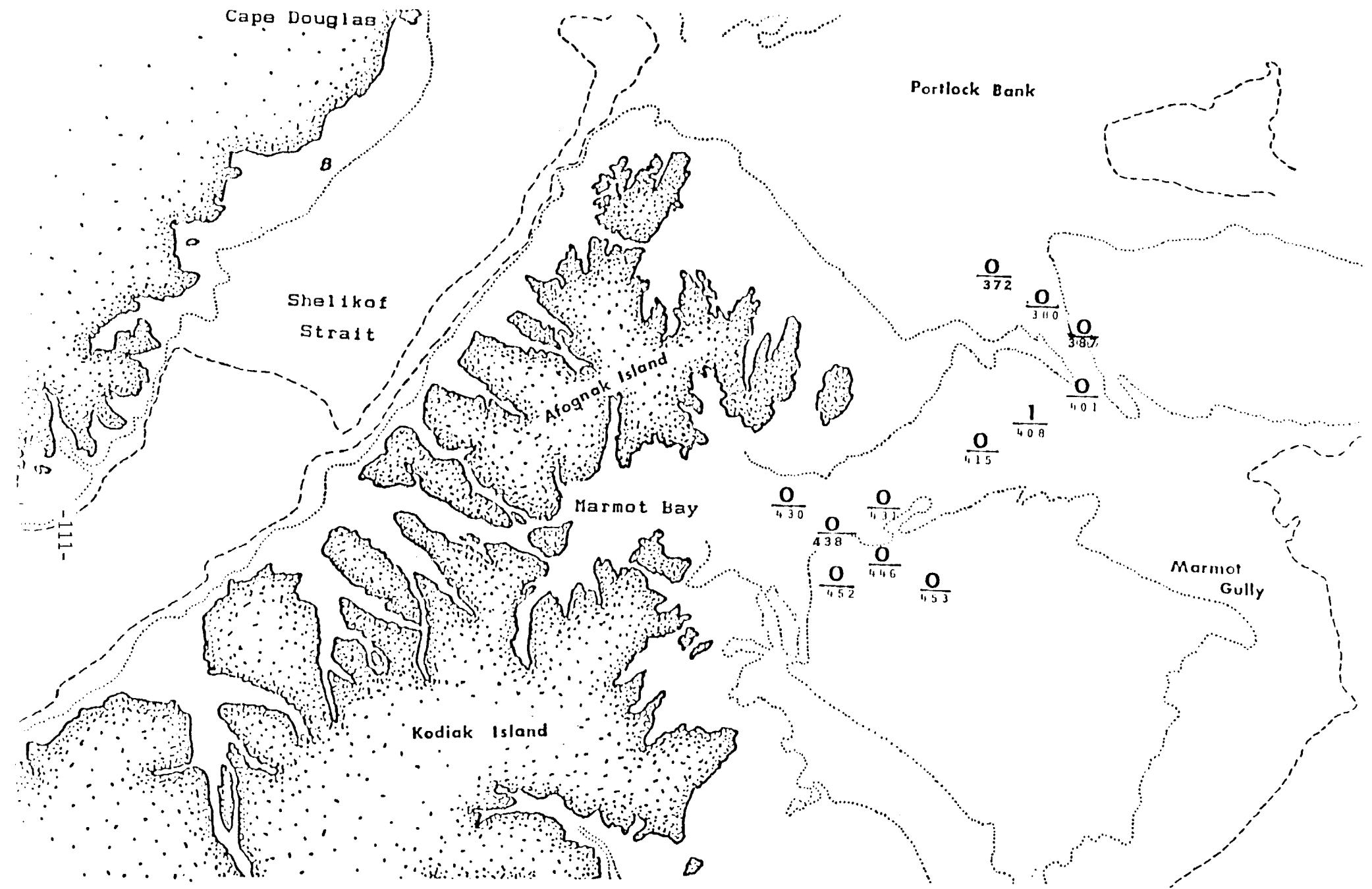


Figure 12b. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1973).

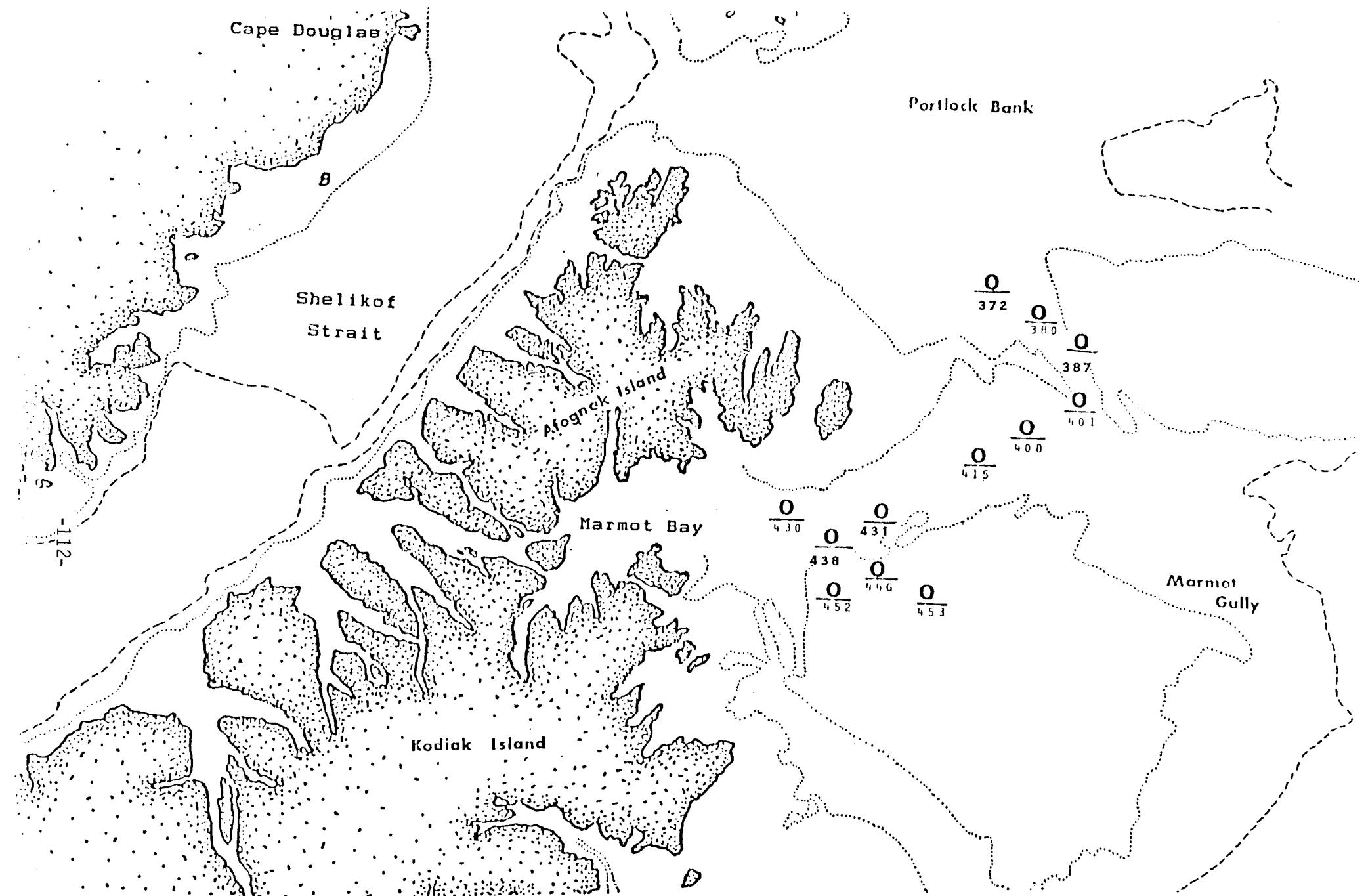


Figure 12c. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1974).

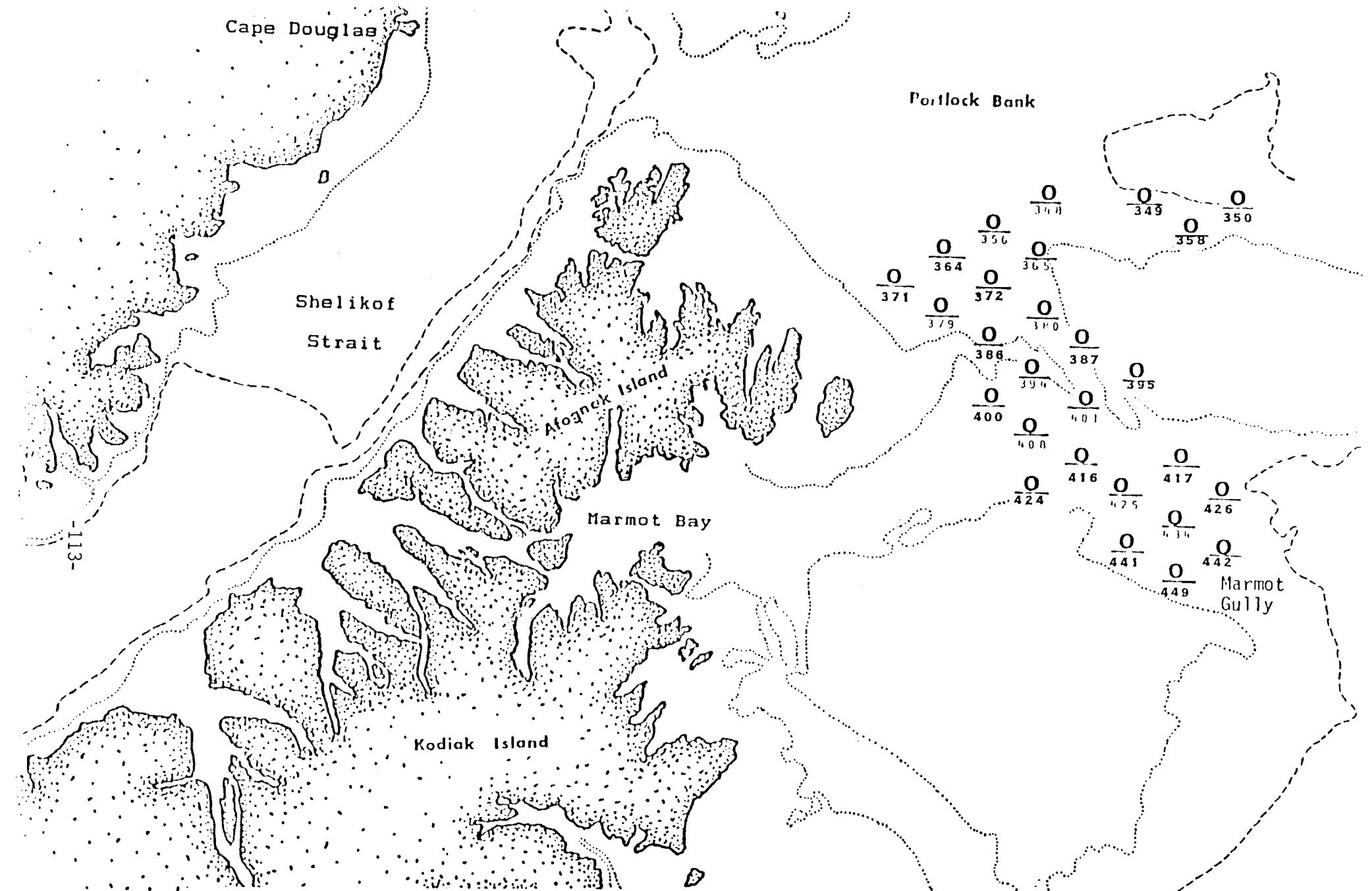


Figure 12d. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shetikof Strait; Kodiak Island (1975).

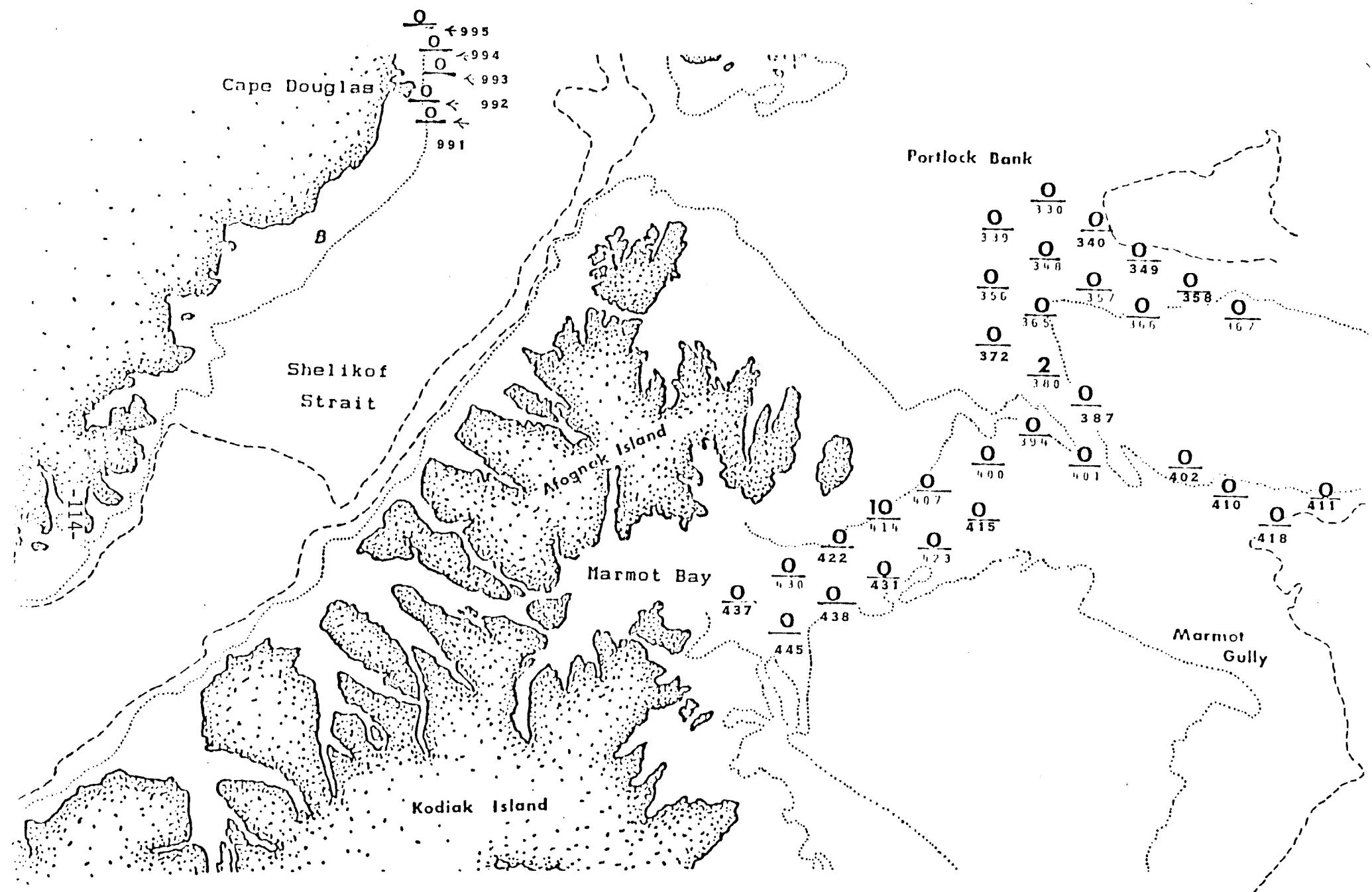


Figure 12e. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1976).

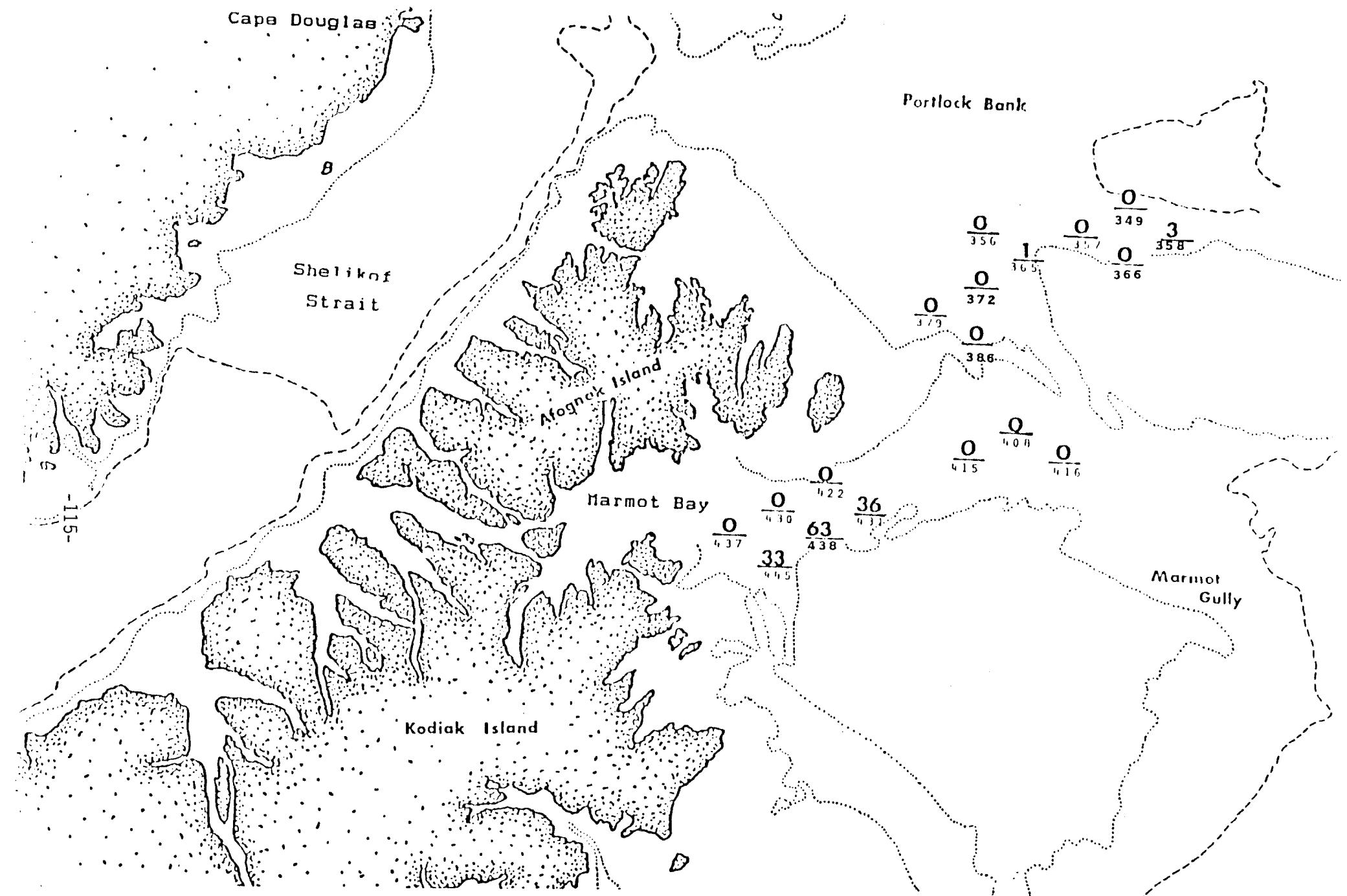


Figure 12f. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1977).

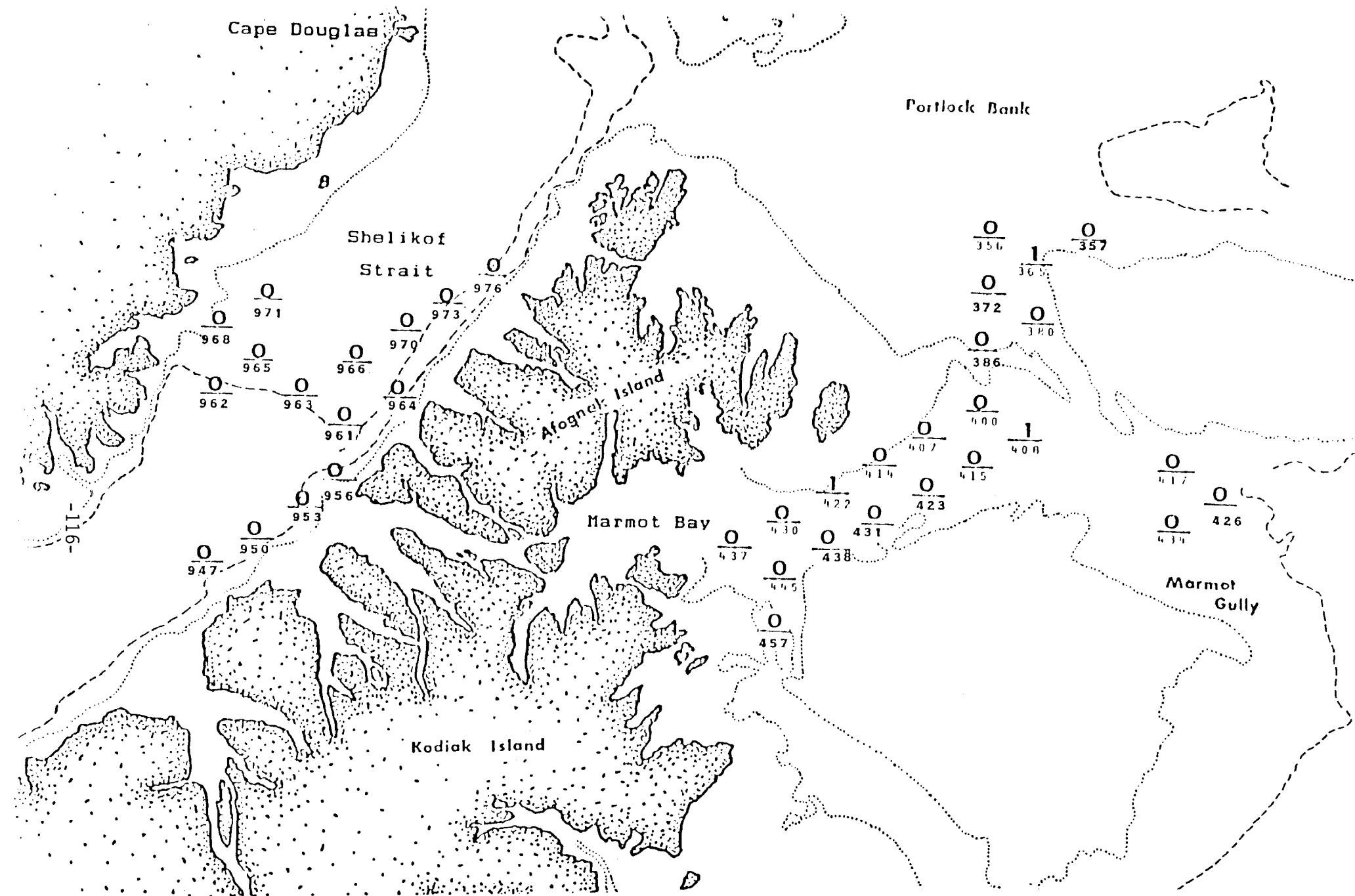


Figure 12g. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1979).

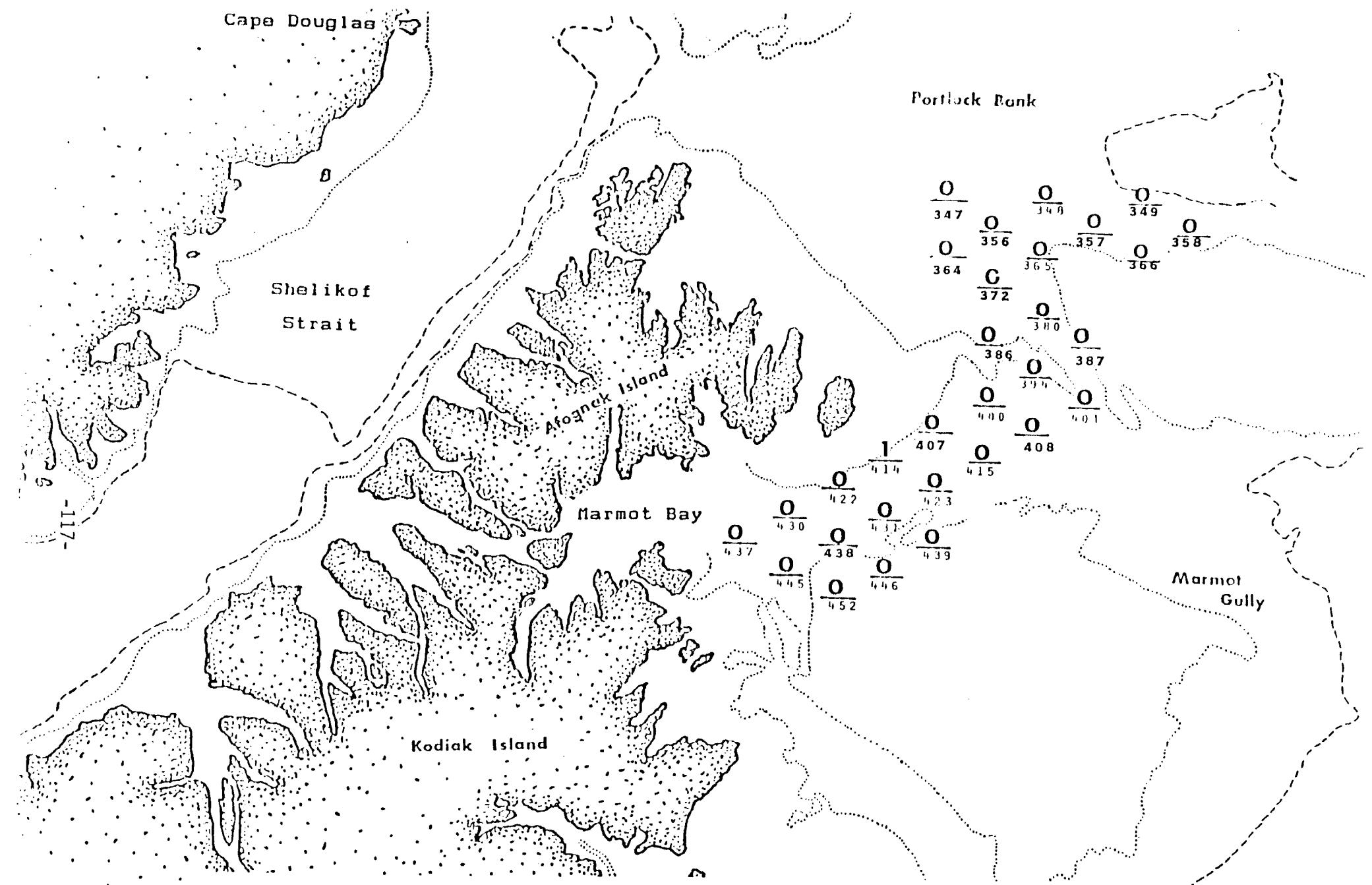


Figure 12h. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1980).

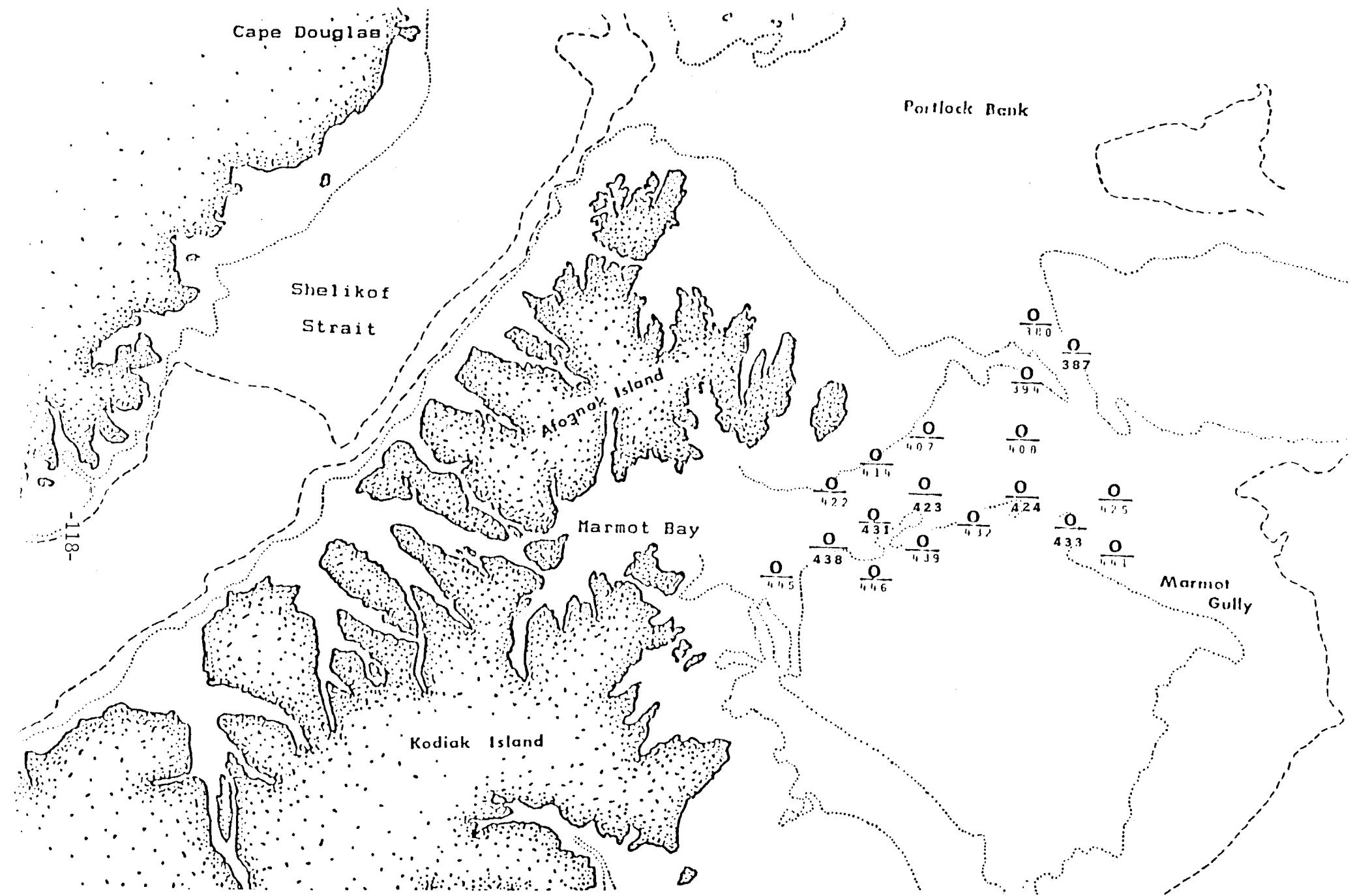


Figure 12i. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1981).

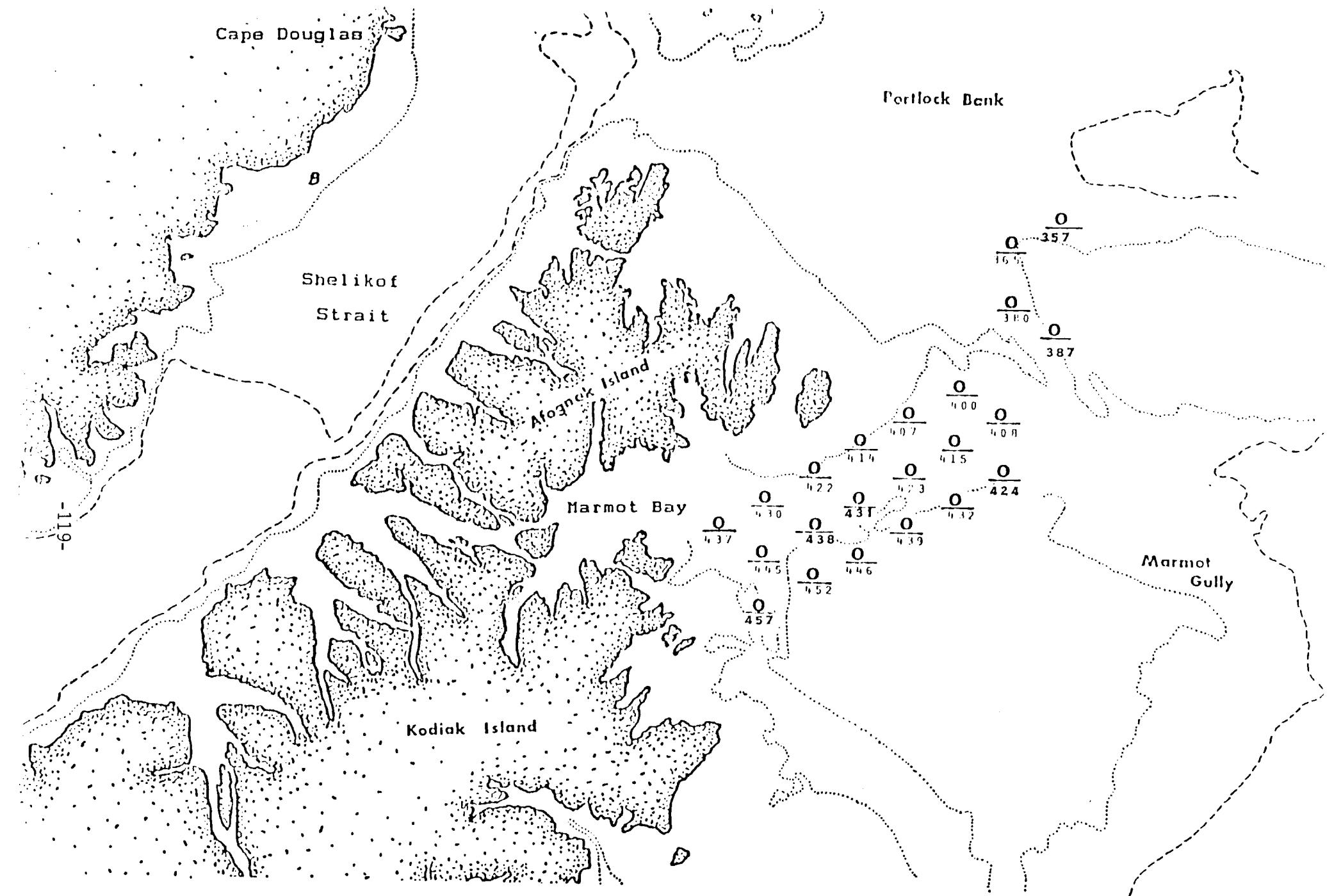


Figure 12j. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1982).

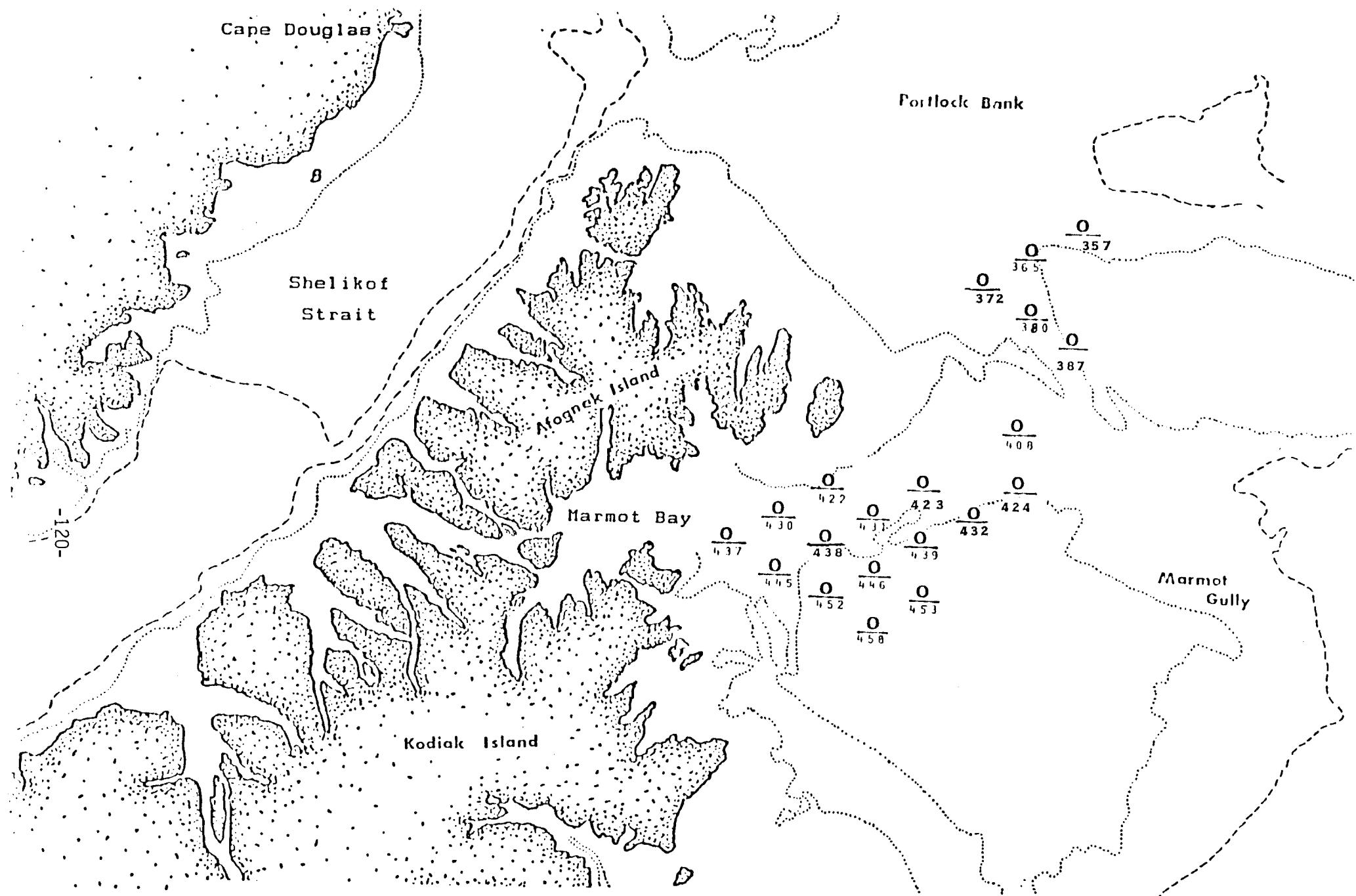


Figure 12k. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1983).

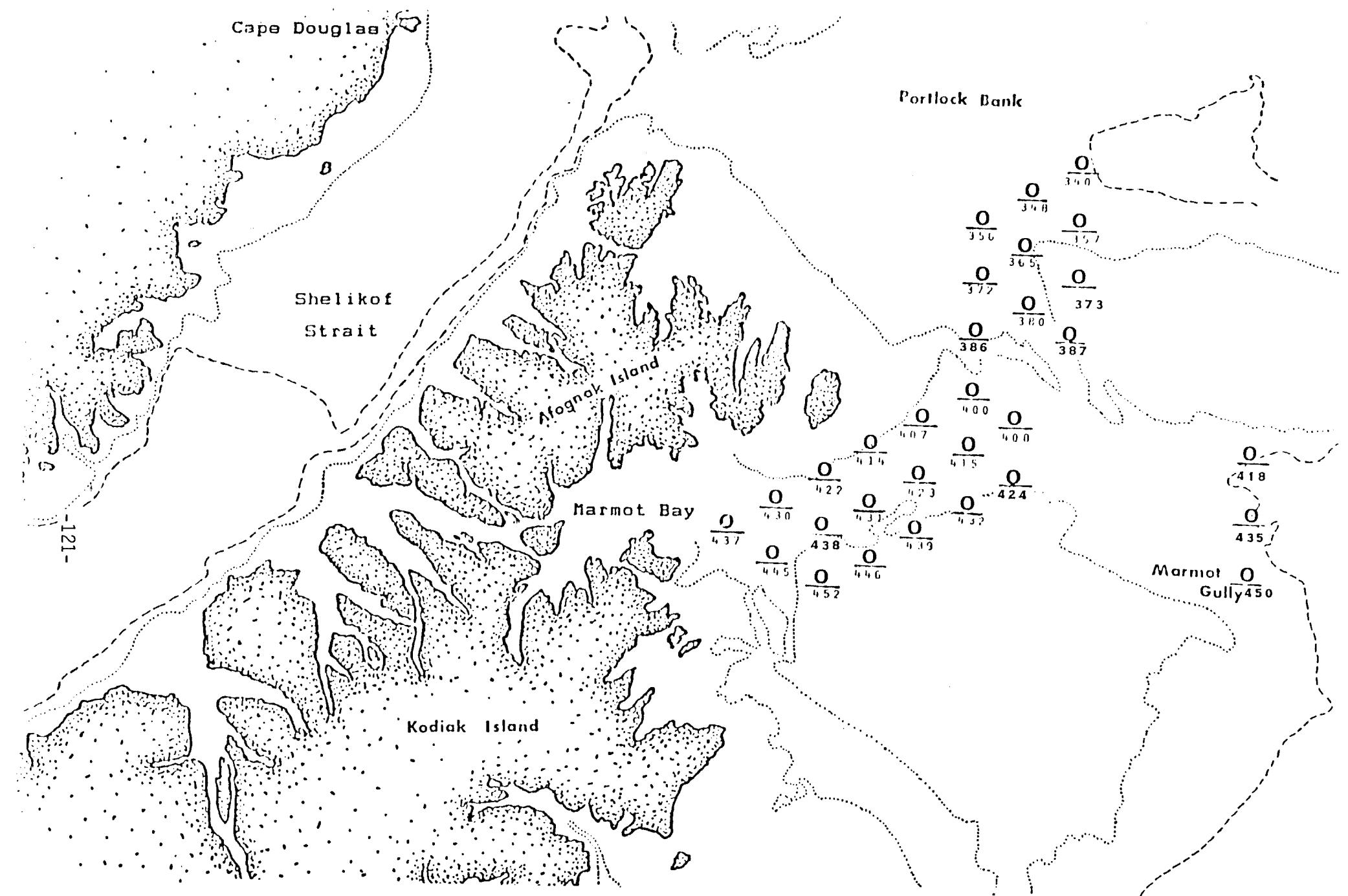


Figure 12L. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Portlock Bank, Outer Marmot, and Shelikof Strait; Kodiak Island (1984).

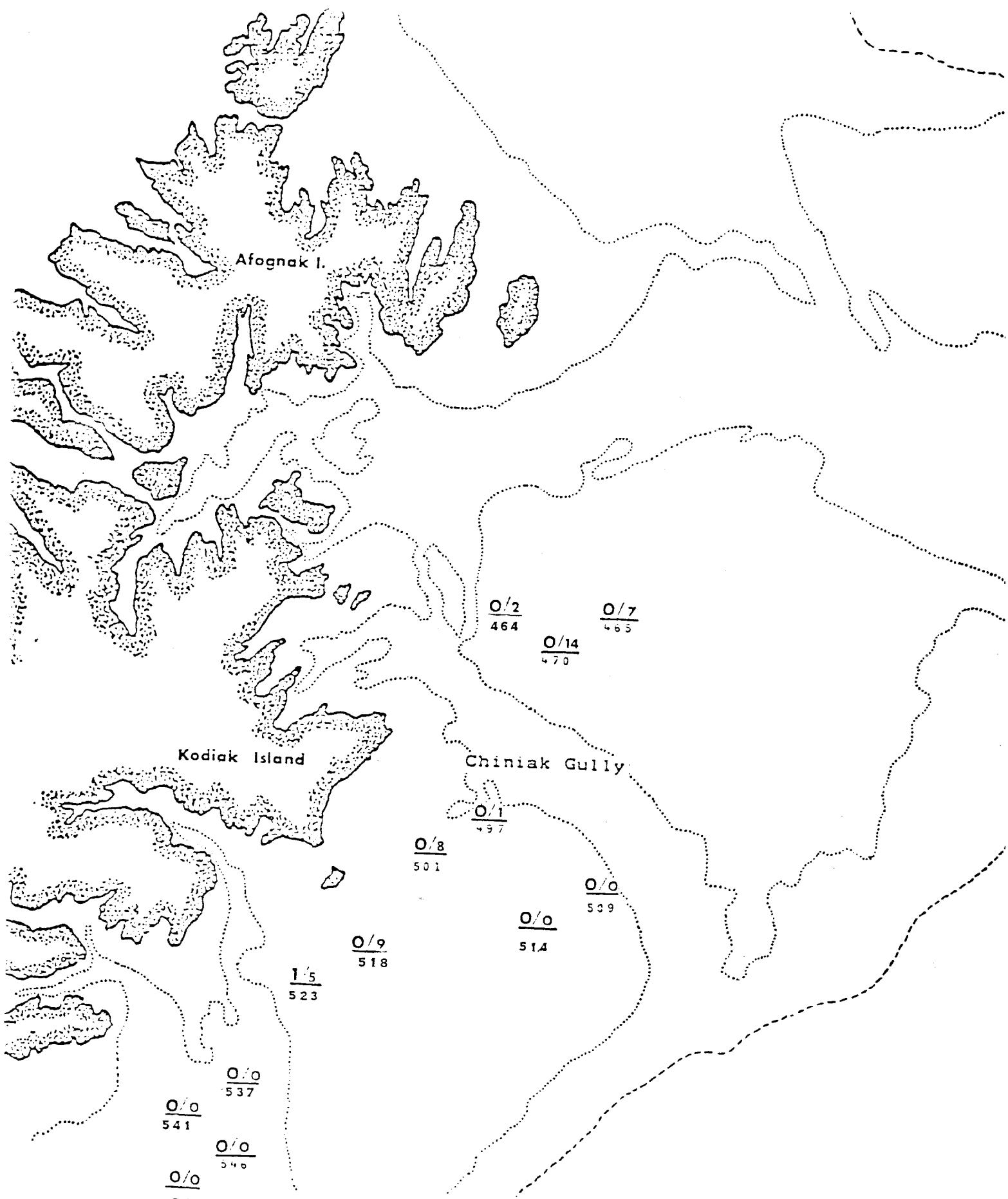


Figure 13a. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1972). Presented as: Legal males/Adult females

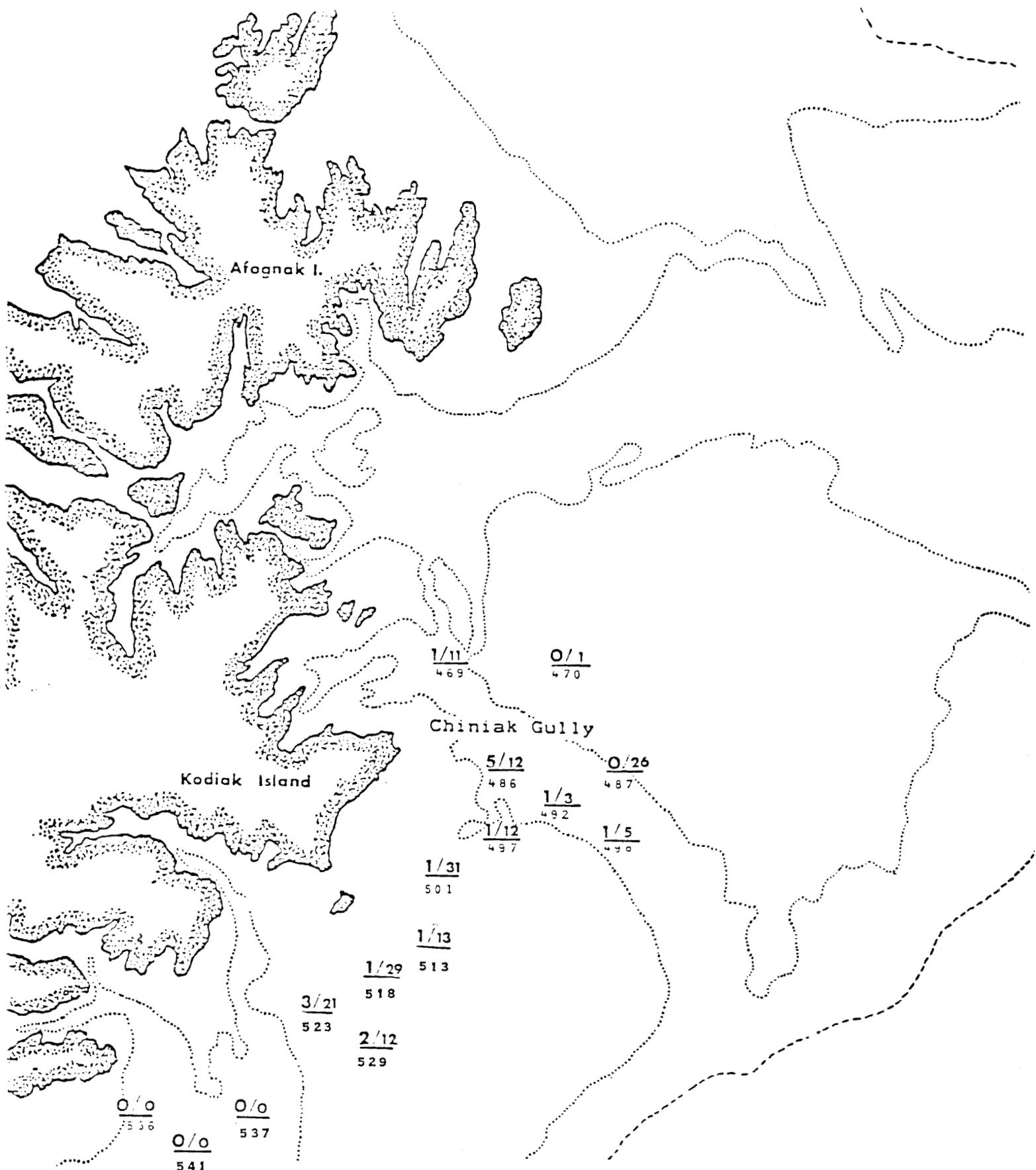


Figure 13b. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1973).

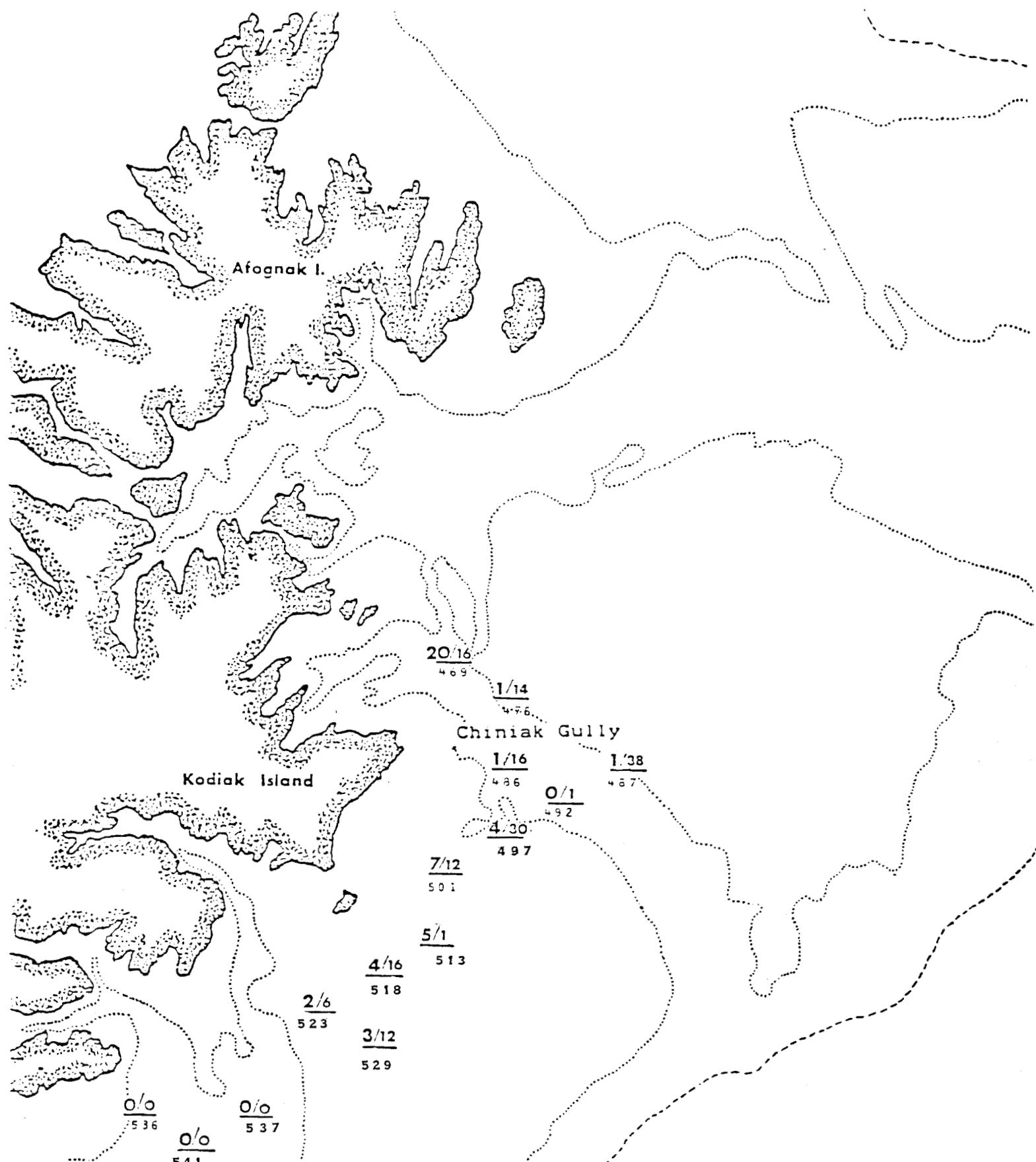


Figure 13c. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1974).

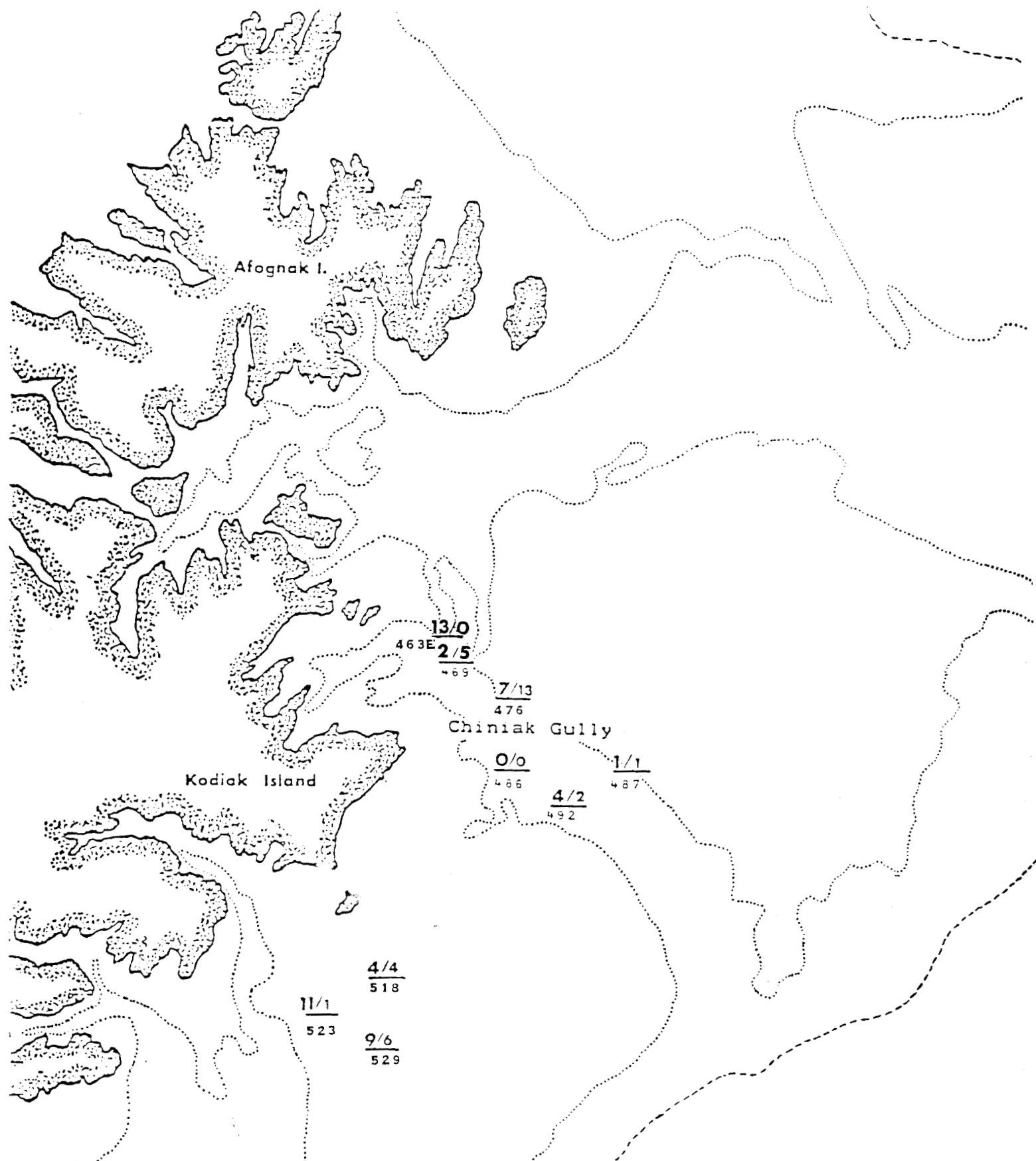


Figure 13d. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1975).

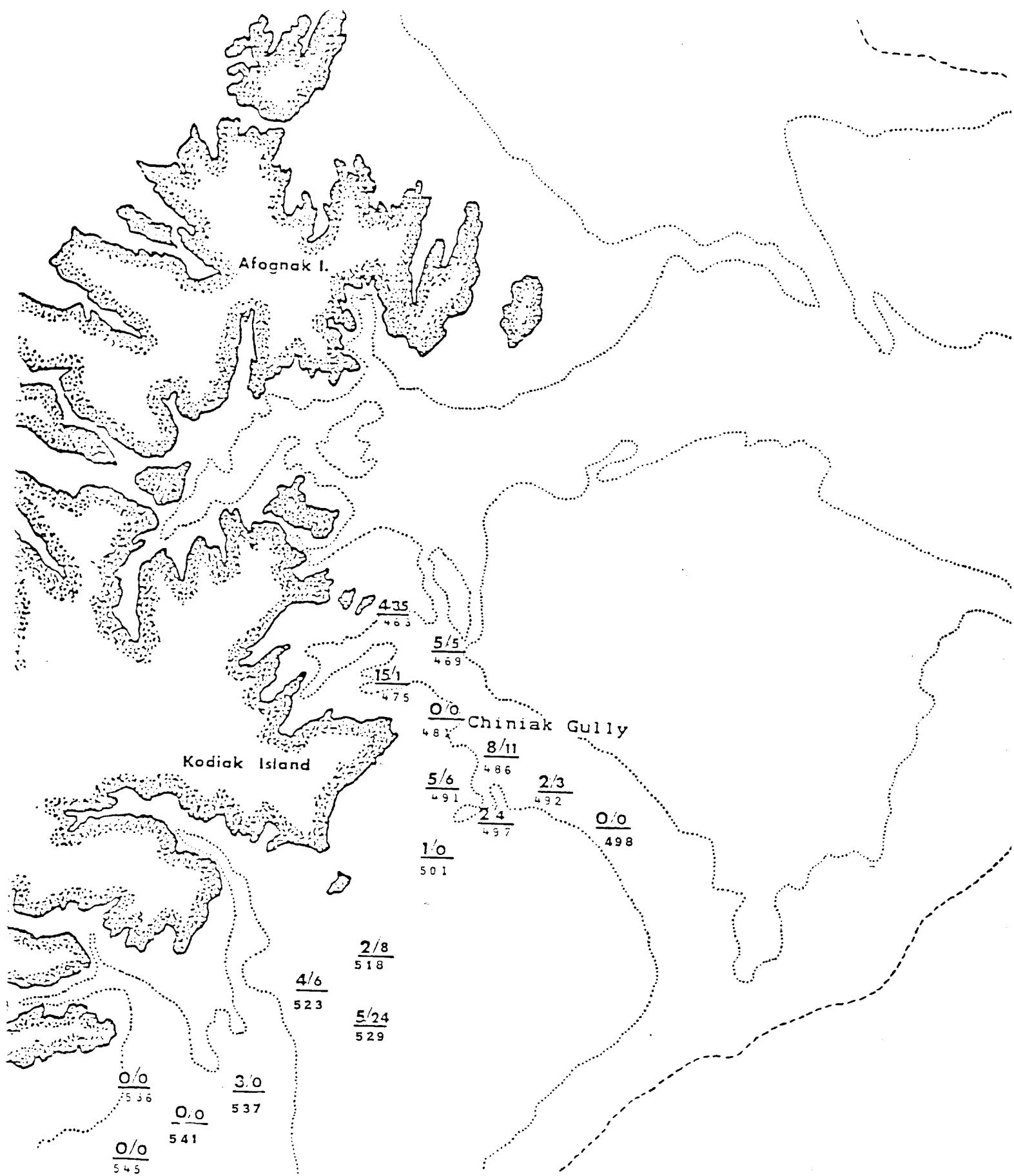


Figure 13e. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1976).

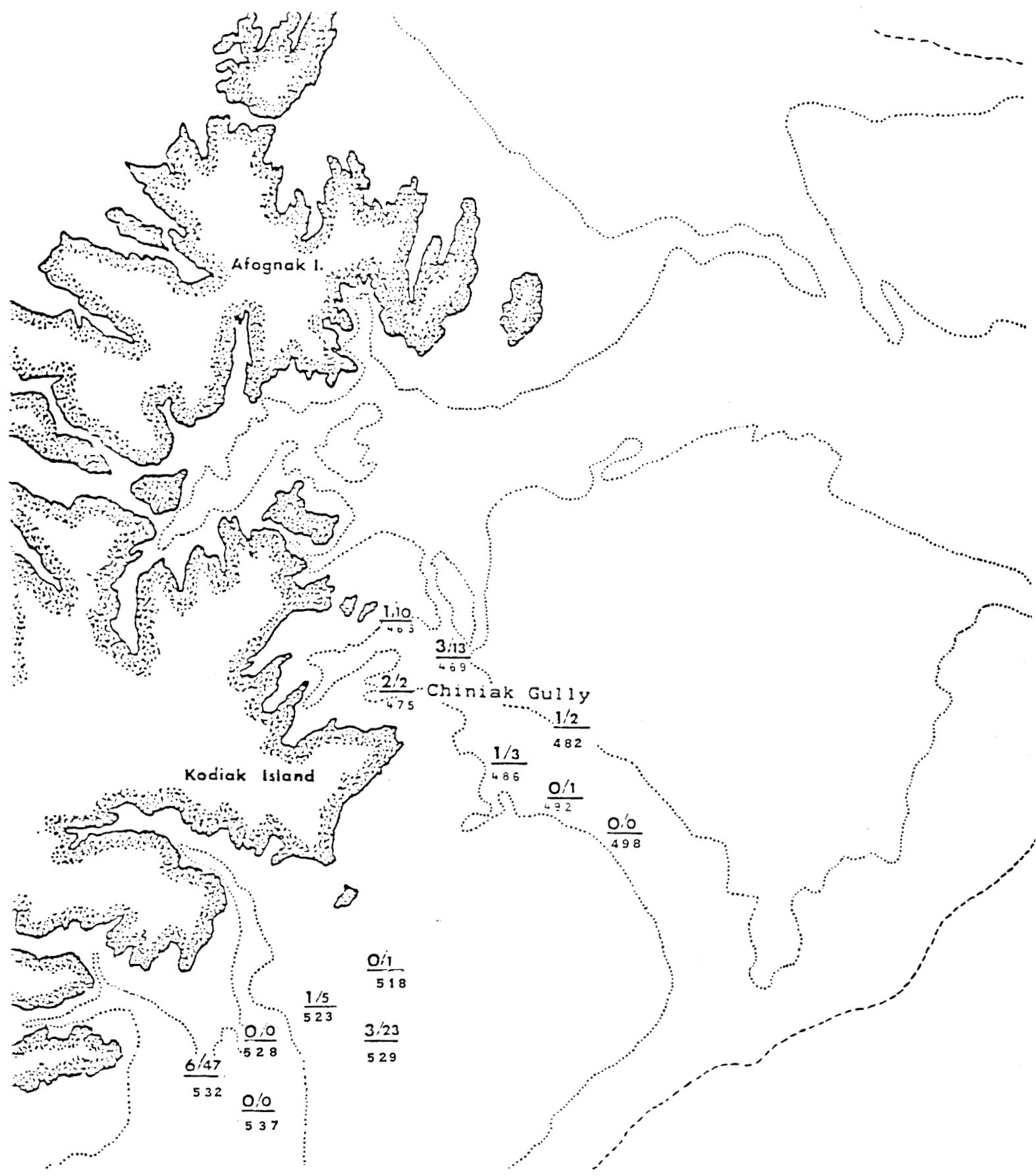


Figure 13f. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1977).

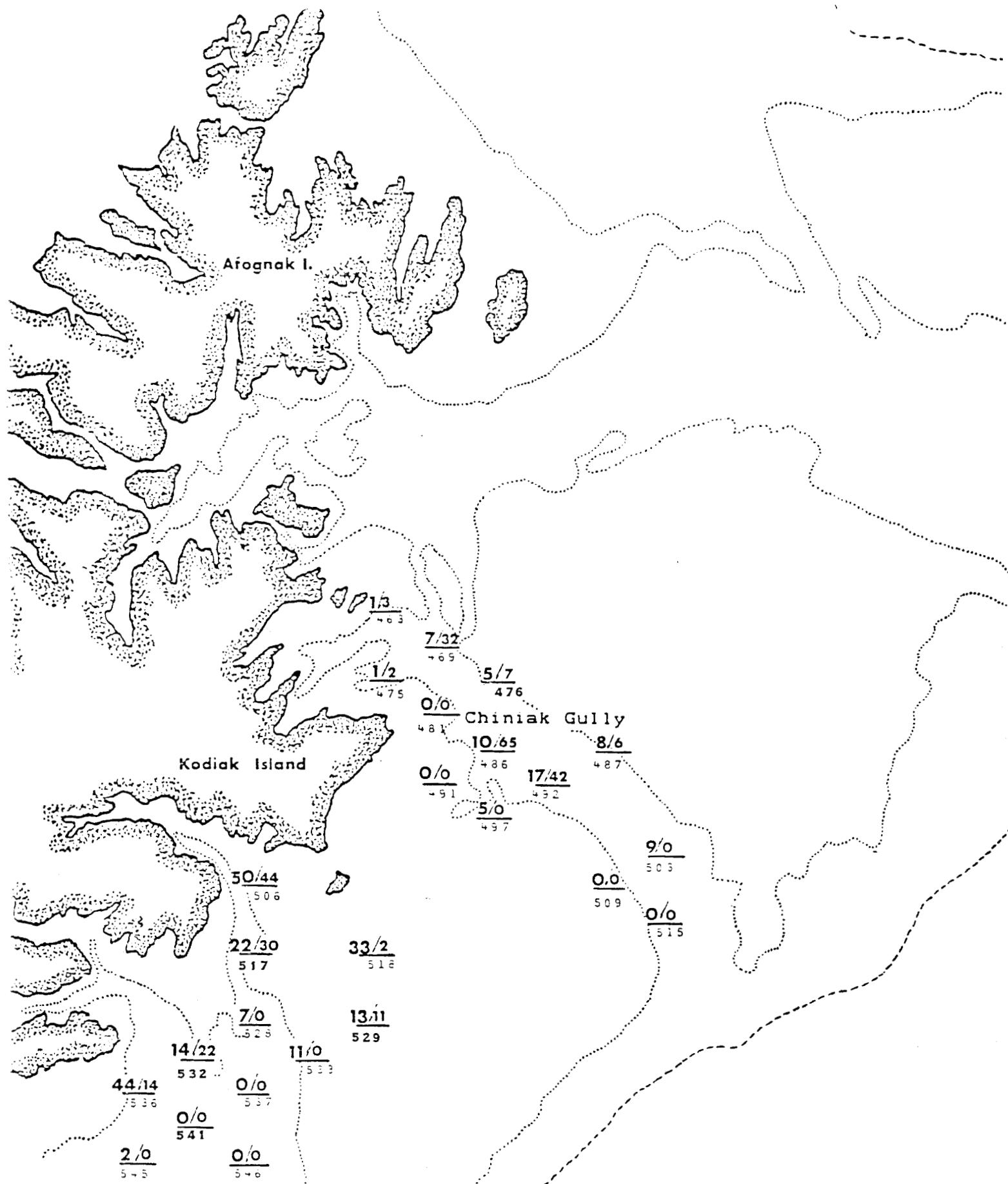


Figure 13g. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1979).

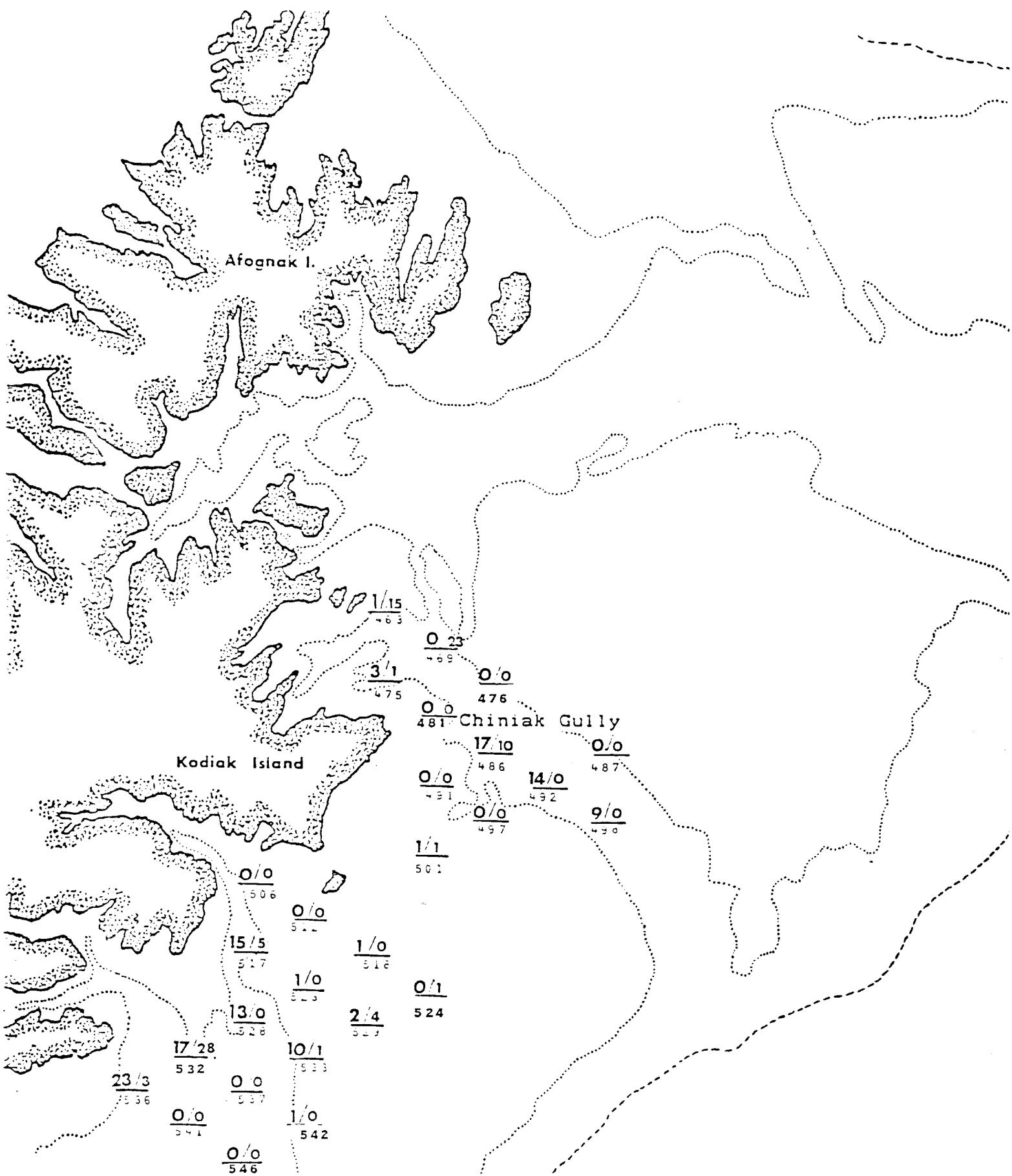


Figure 13h. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1980).

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Presented as: Legal males/Adult females

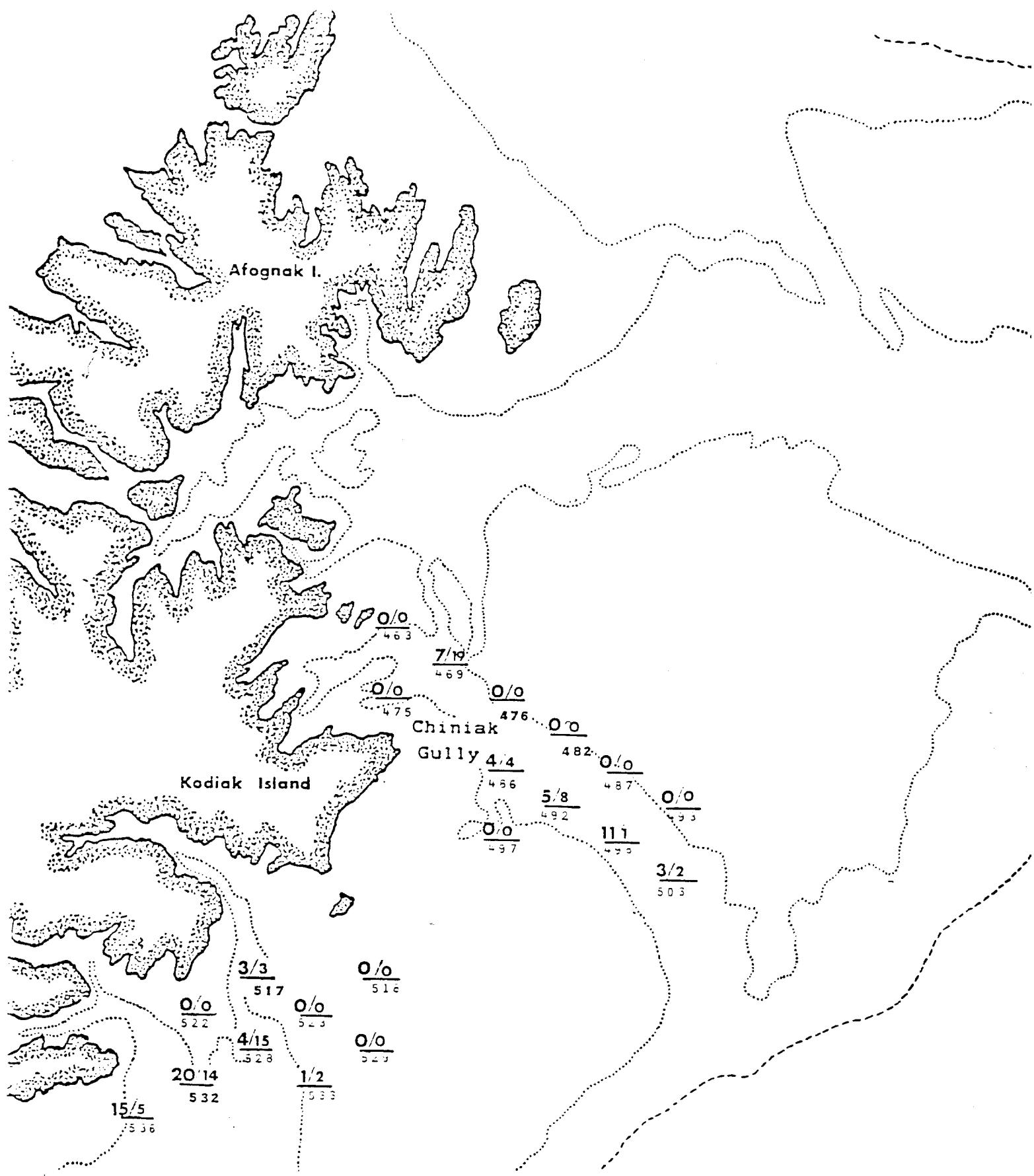


Figure 13i. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1981).

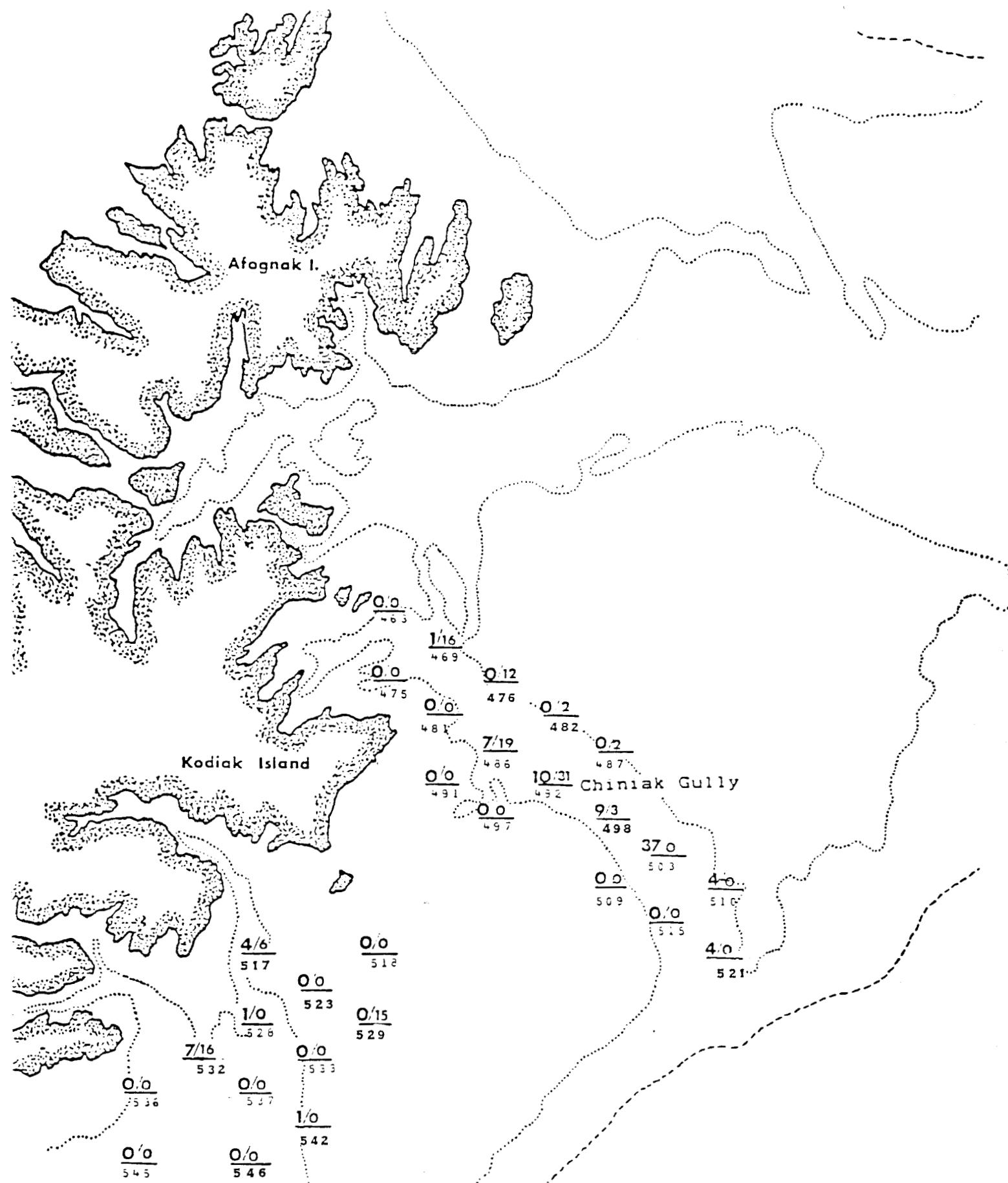


Figure 13j. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1982).

Presented as: Legal males/Adult females

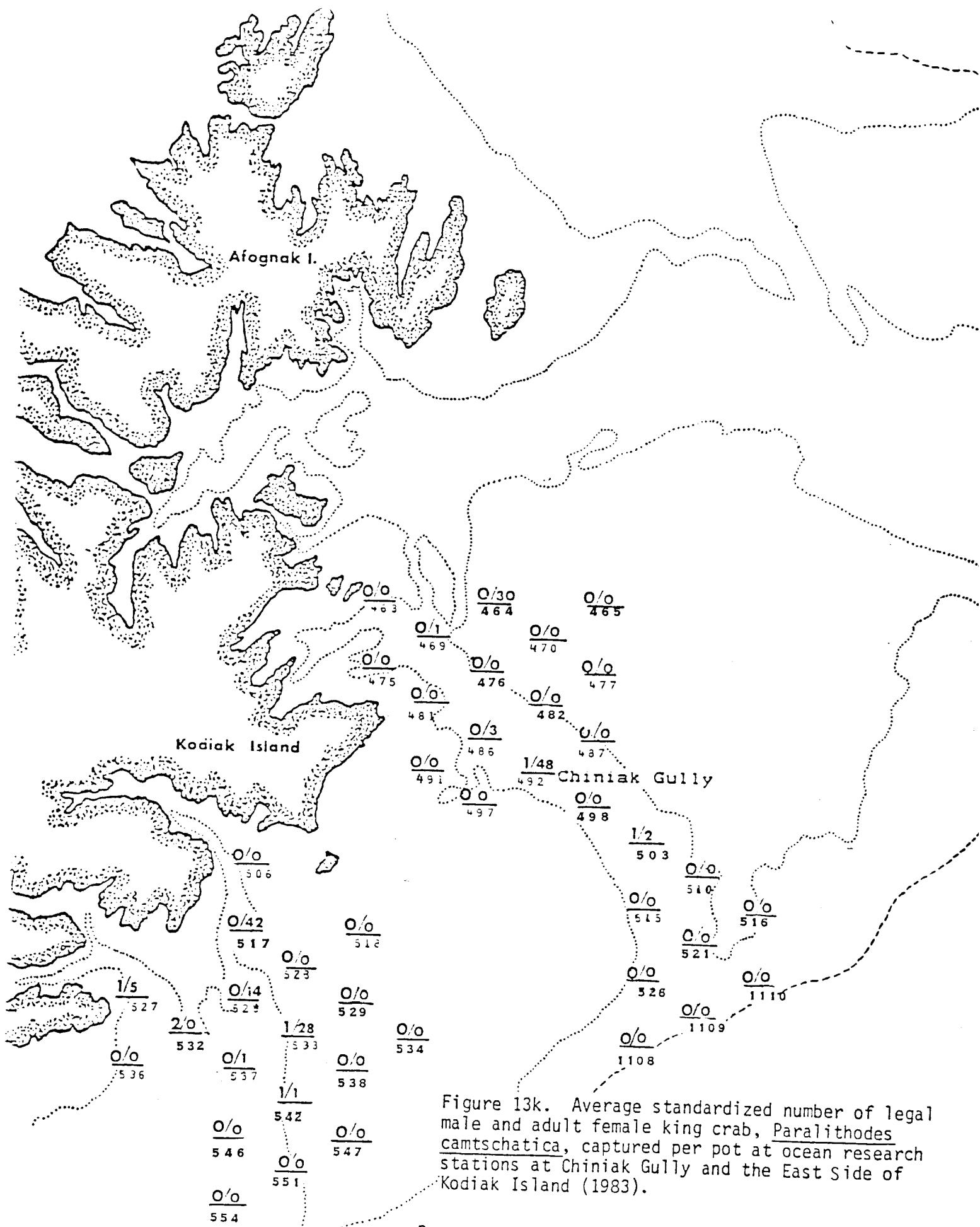


Figure 13k. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1983).

Presented as: Legal males/Adult females  
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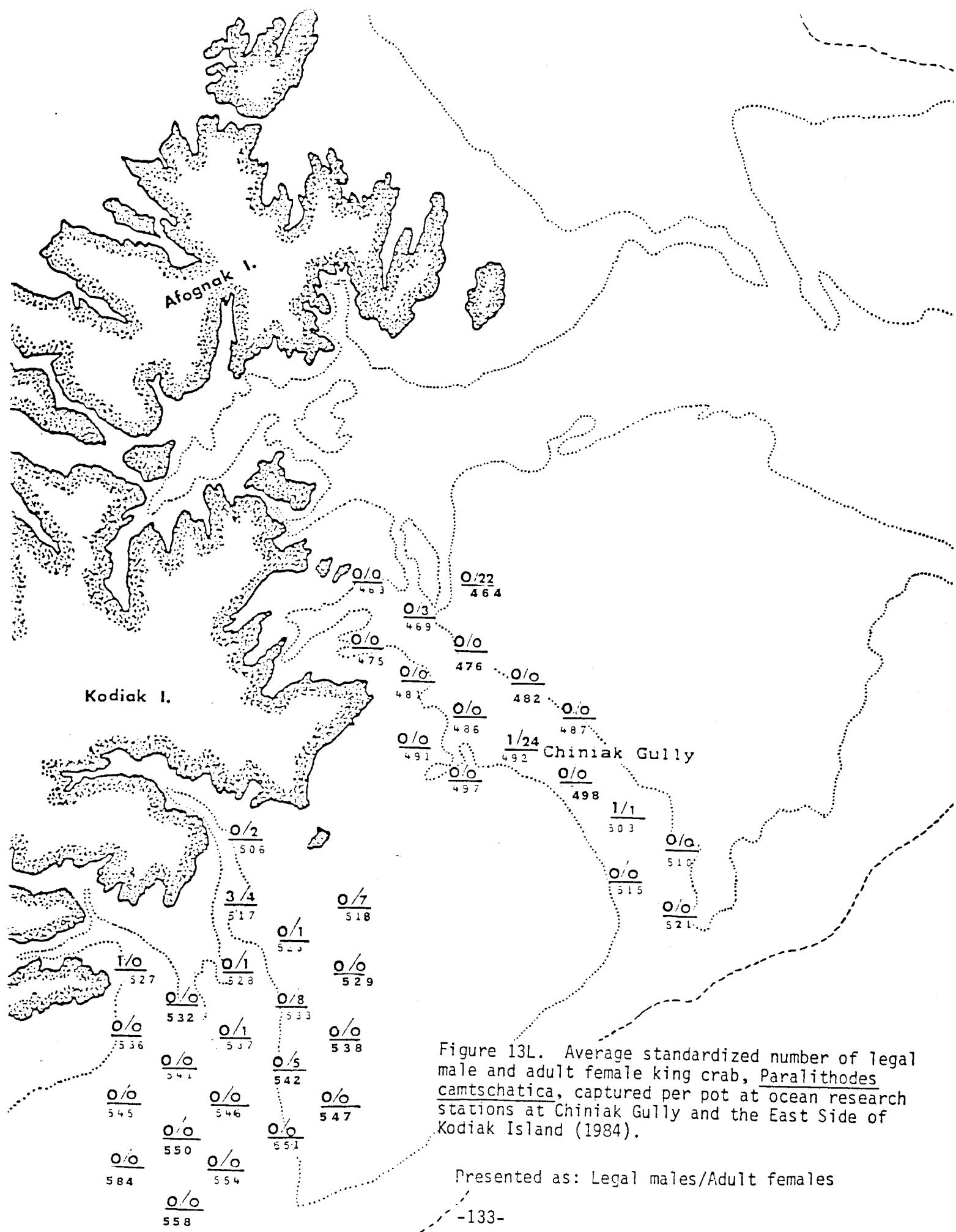


Figure 13L. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1984).

Presented as: Legal males/Adult females

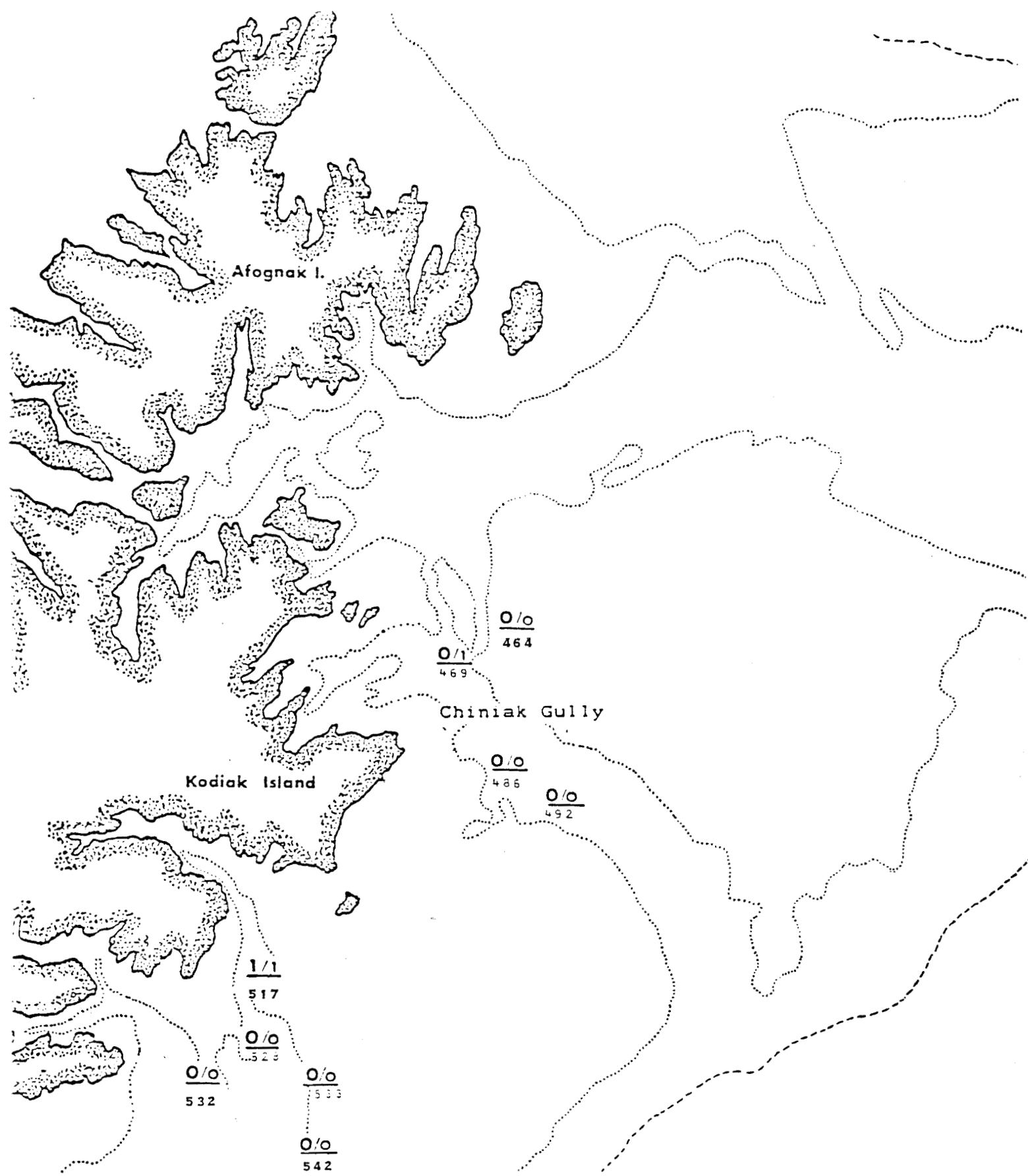


Figure 13m. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1985).

Presented as: Legal males/Adult females

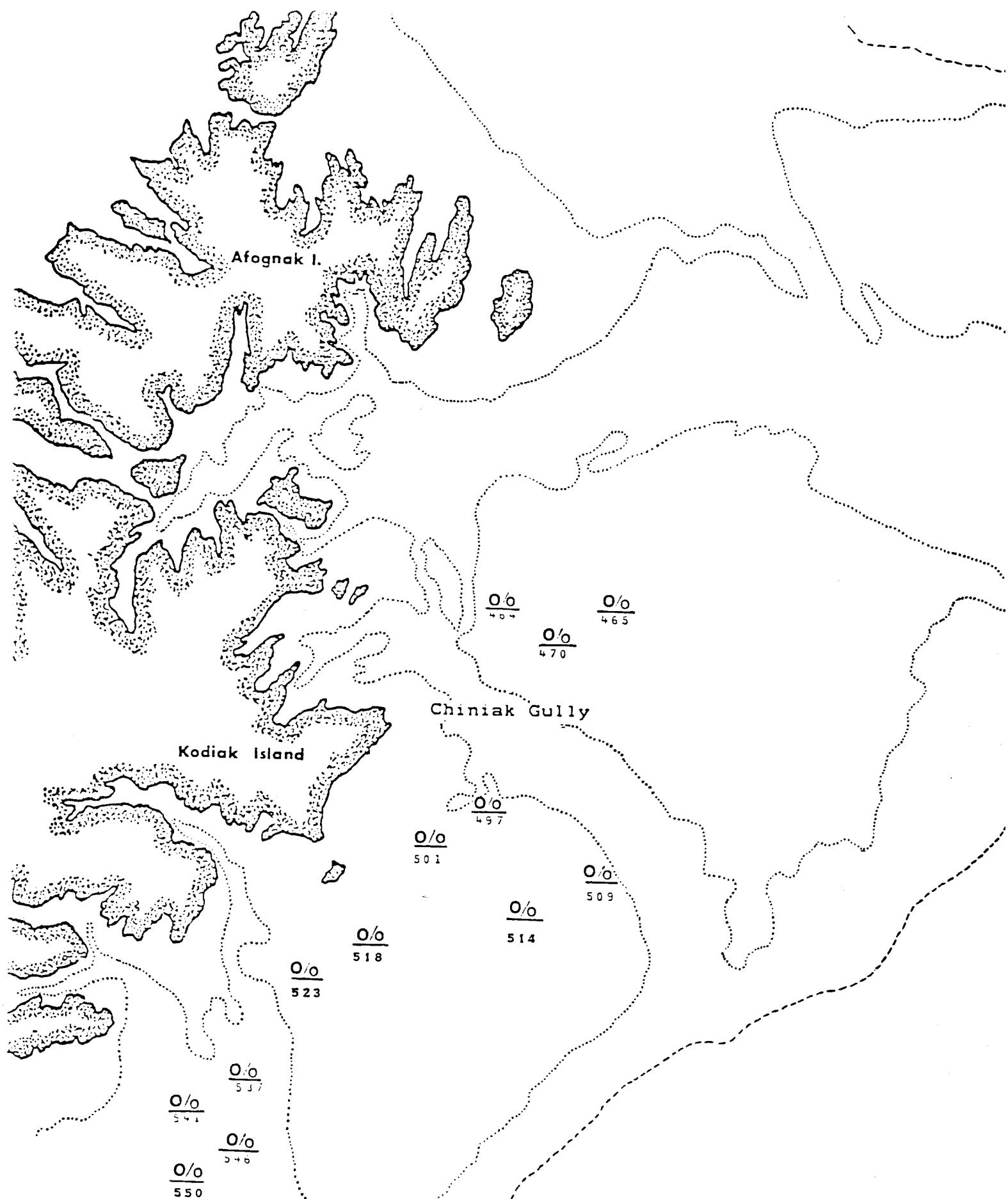


Figure 14a. Average standardized number of prae-recruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1972).

Presented as: 1's + 2's/3's + 4's

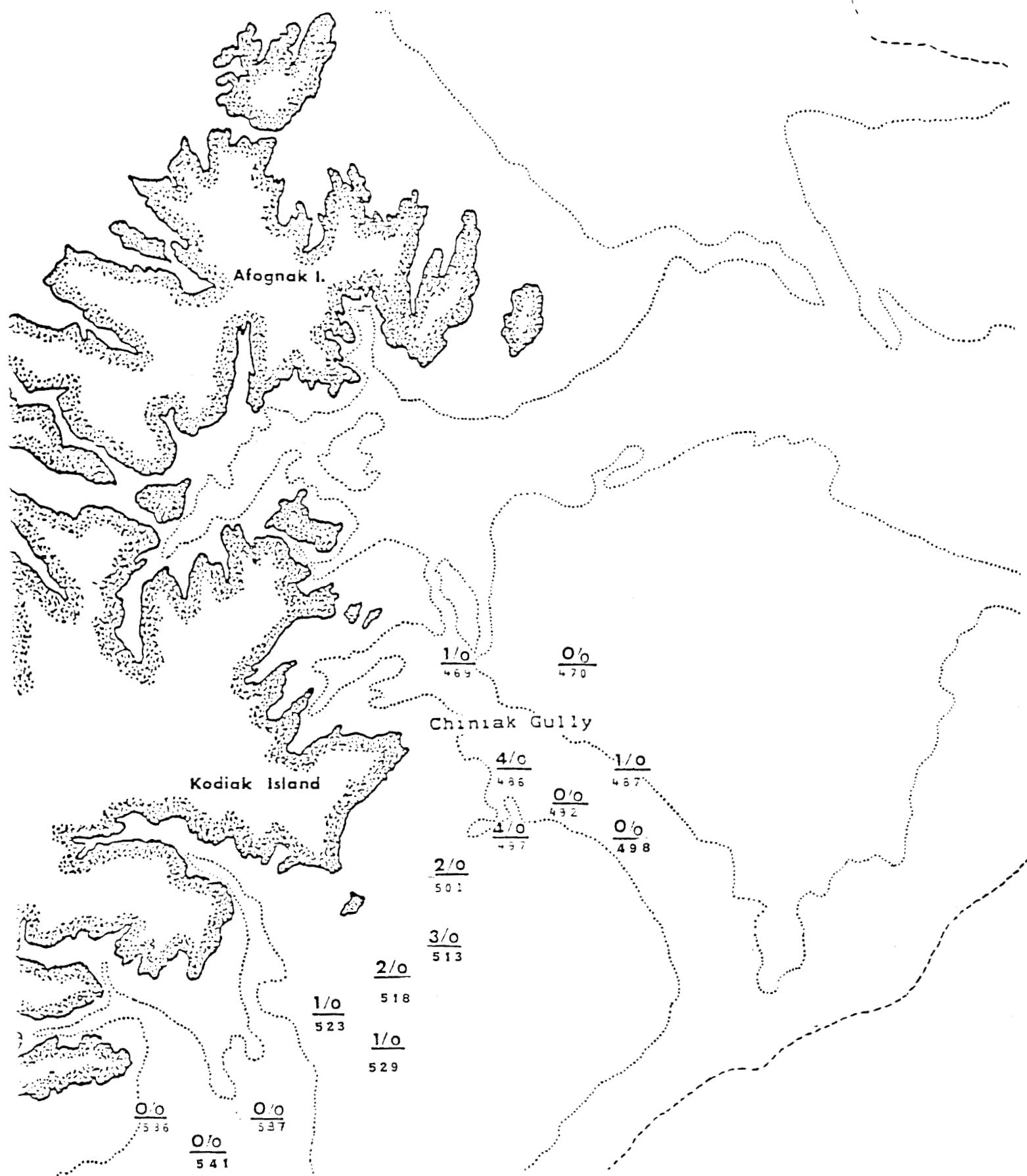


Figure 14b. Average standardized number of prae-recruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1973).

Presented as: 1's + 2's/3's + 4's

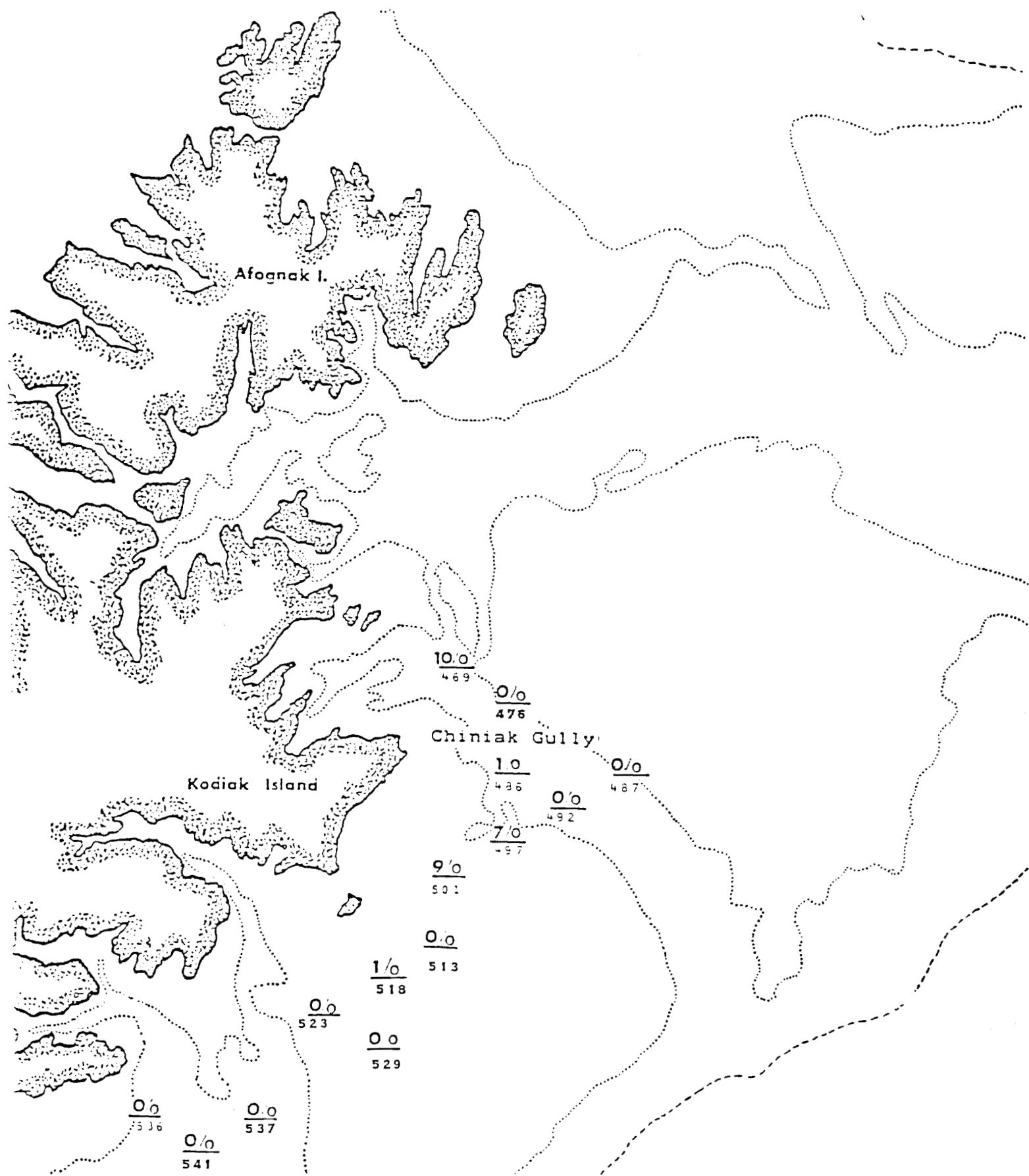


Figure 14c. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1974).

Presented as: 1's + 2's/3's + 4's

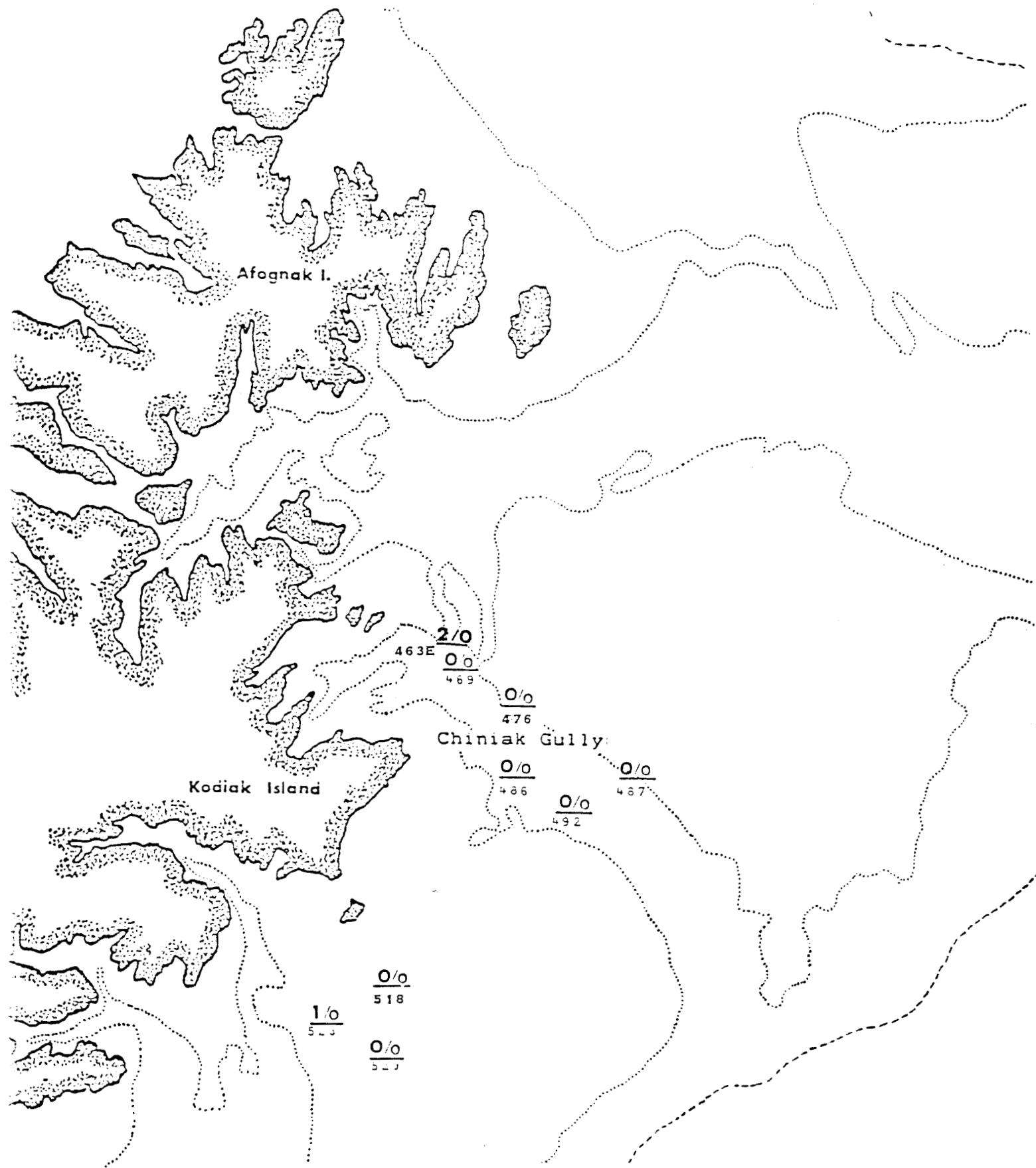
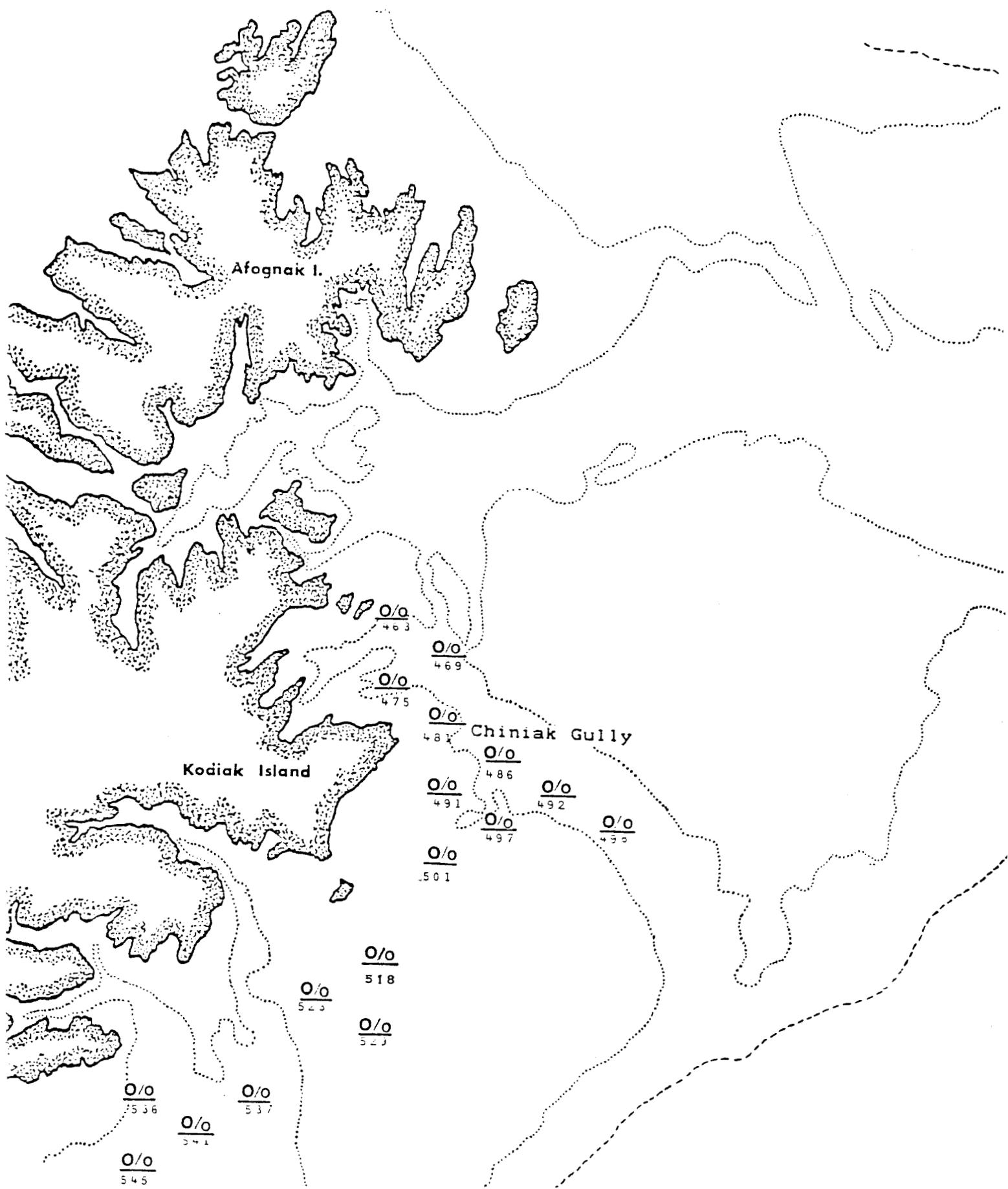


Figure 14d. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1975).

Presented as: 1's + 2's/3's + 4's



**Figure 14e.** Average standardized number of prerecruit male king crab, Paralithodes camtschatic captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1976).

Presented as: 1's + 2's/3's + 4's

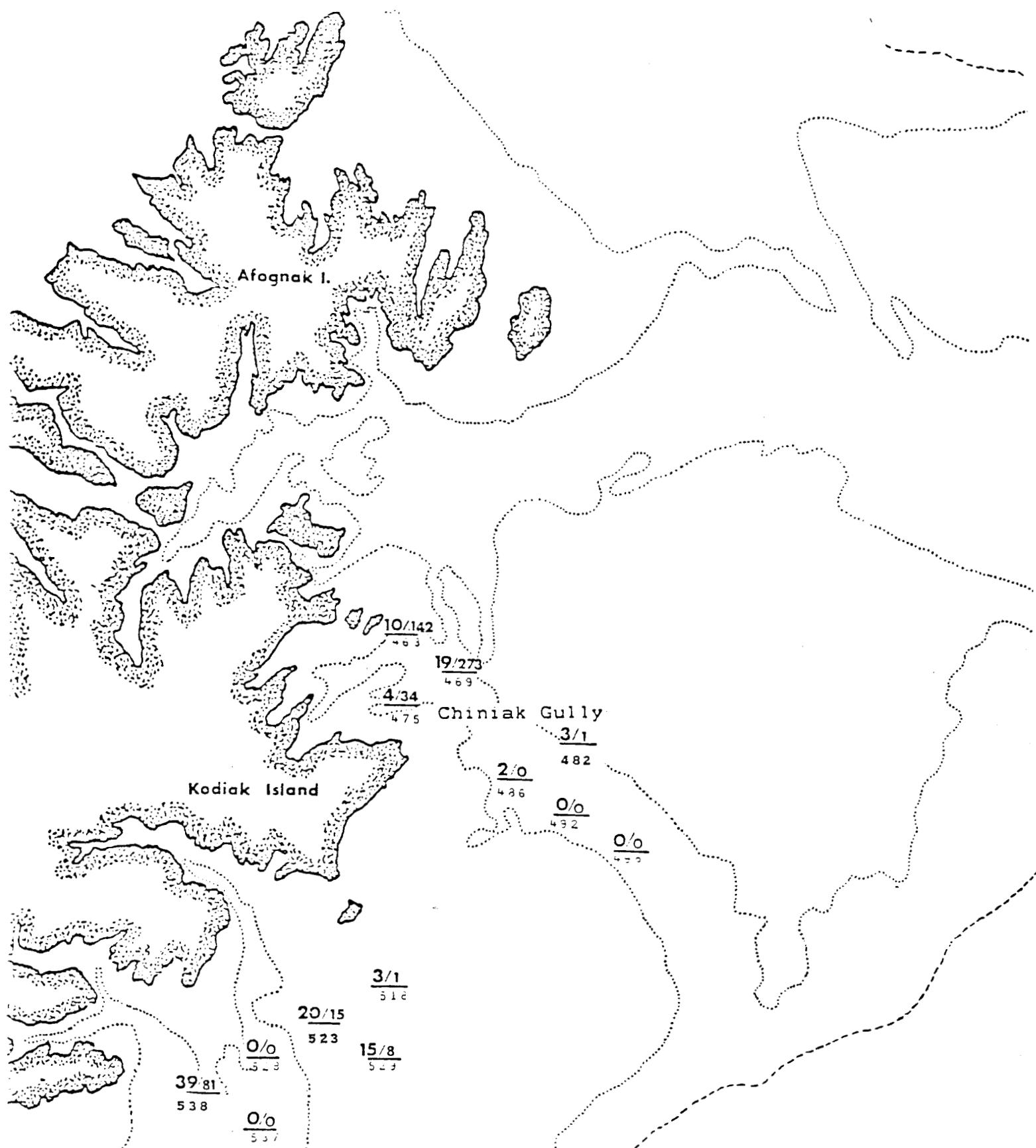


Figure 14f. Average standardized number of prerecruit male king crab, *Paralithodes camtschaticus* captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1977).

Presented as: 1's + 2's/3's + 4's

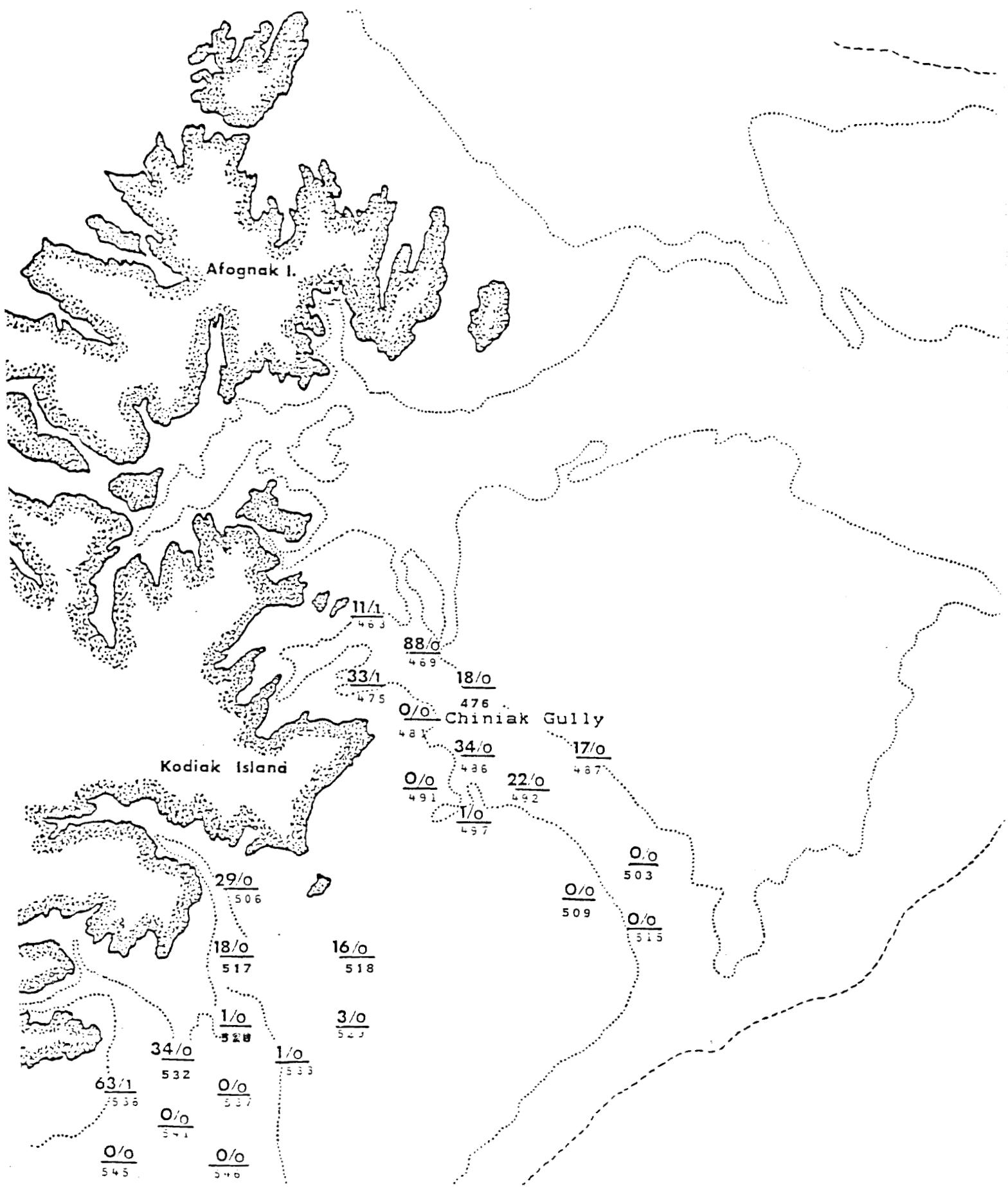


Figure 14g. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1979).

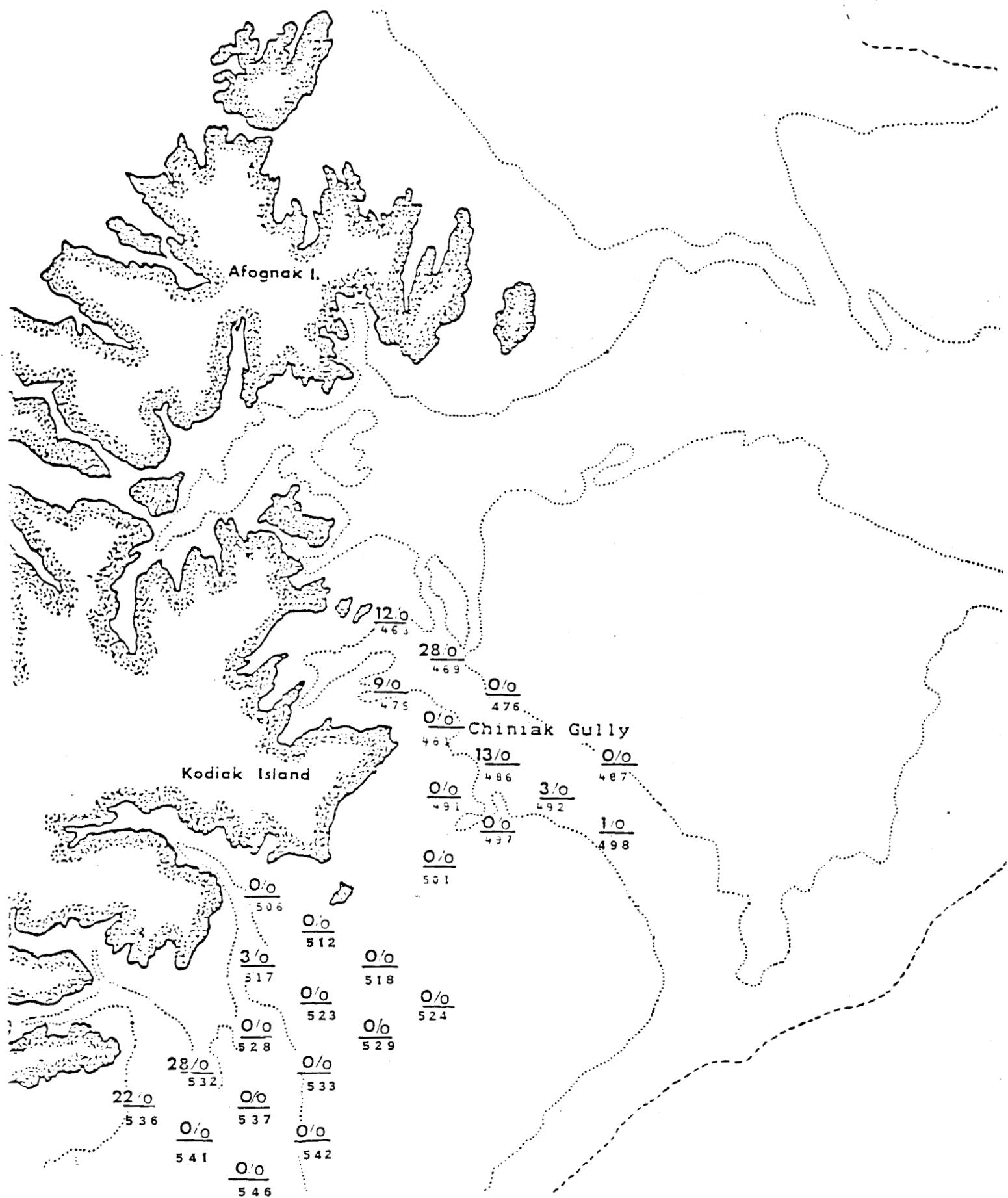


Figure 14h. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1980).

Presented as: 1's + 2's/3's + 4's

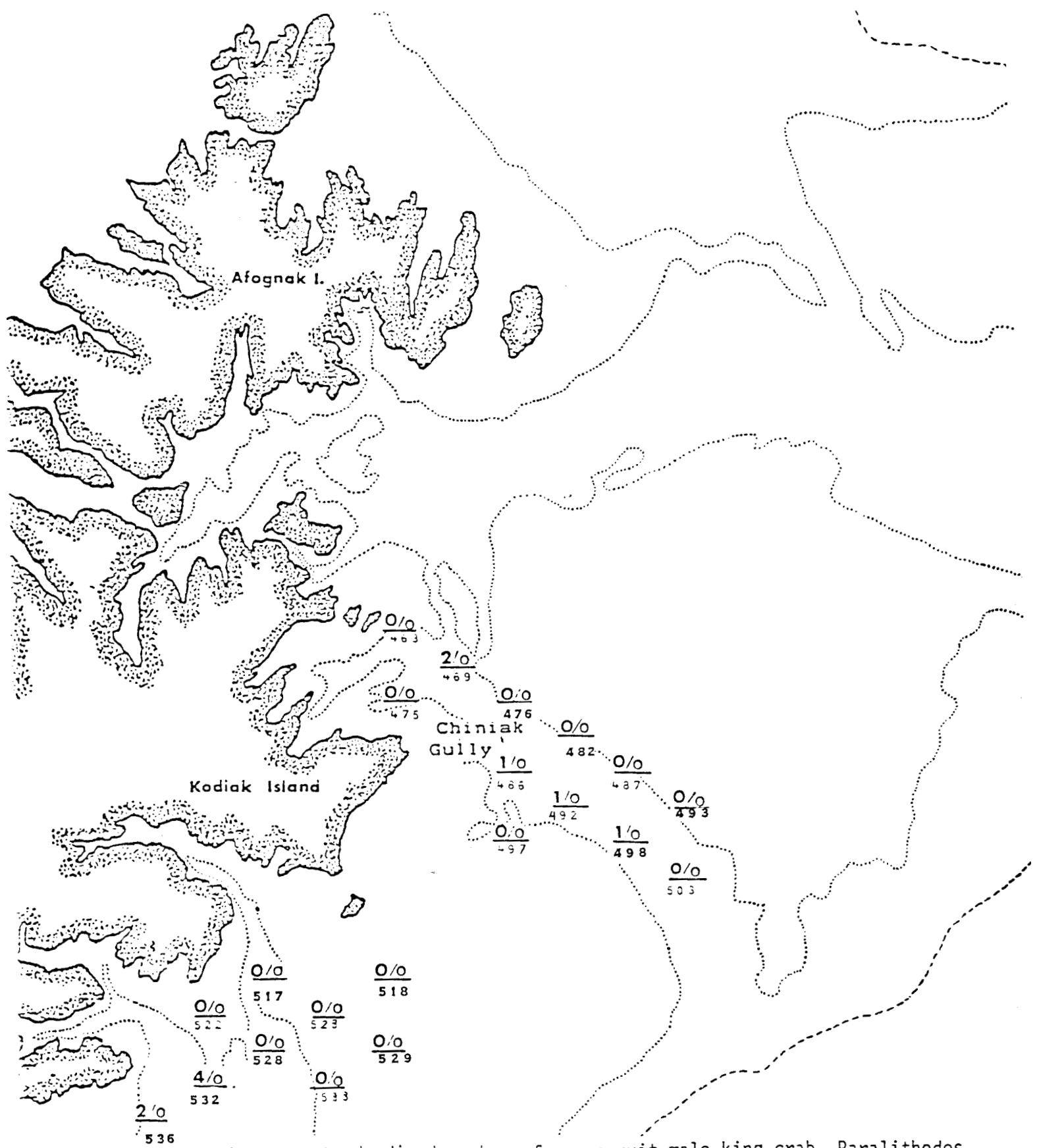


Figure 14i. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1981).

Presented as: 1's + 2's/3's + 4's

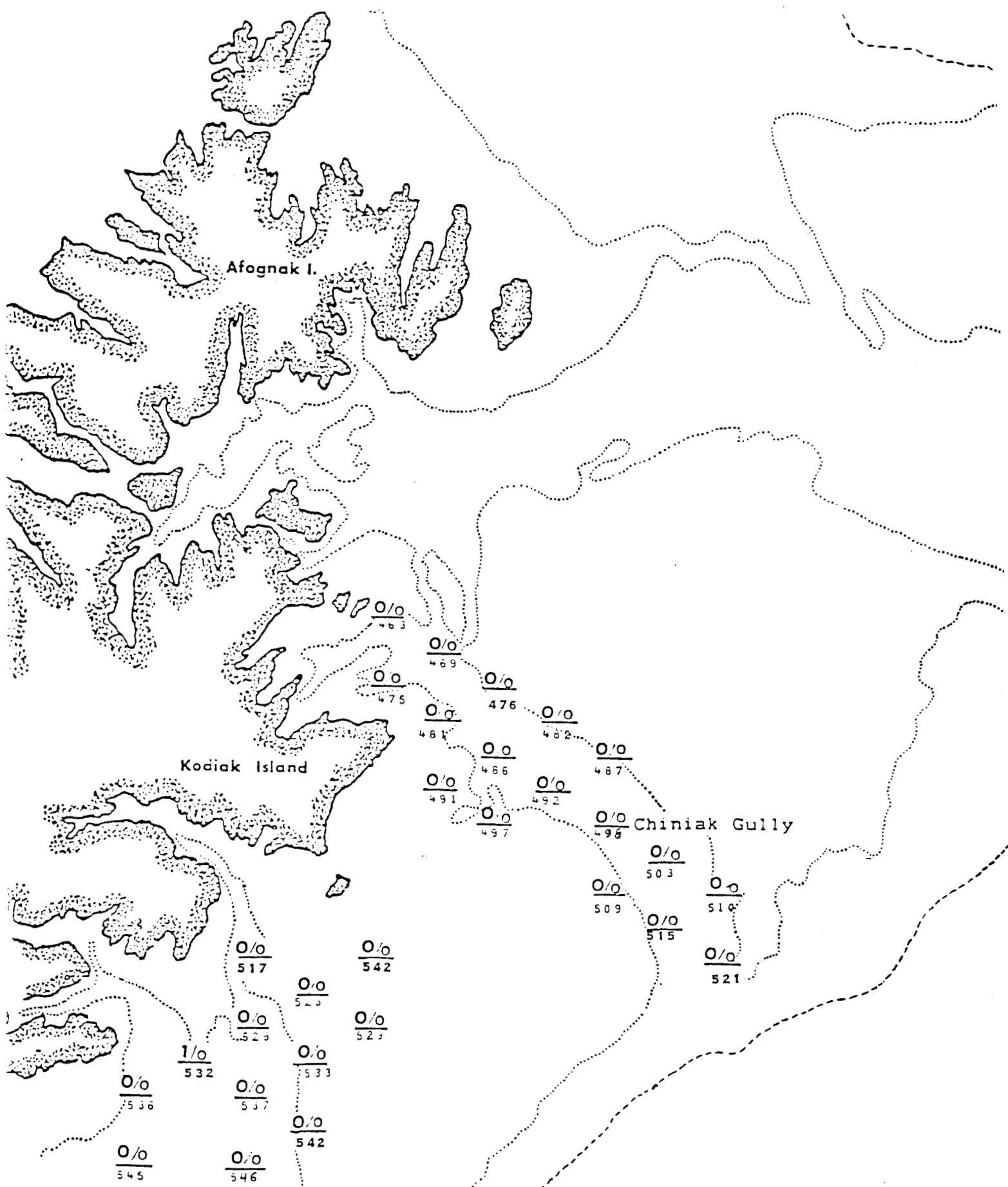


Figure 14j. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1982).

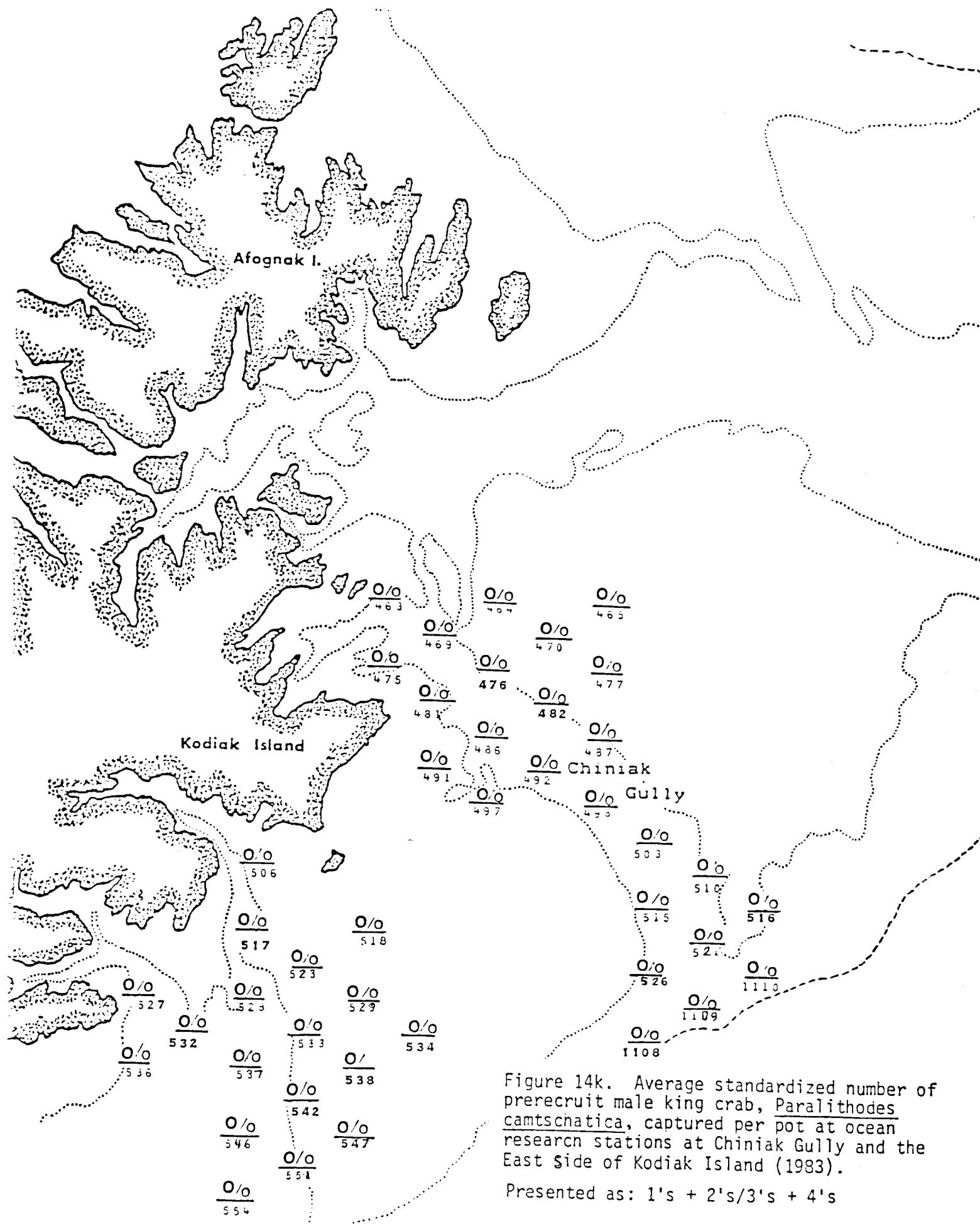


Figure 14k. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1983).

Presented as: 1's + 2's/3's + 4's

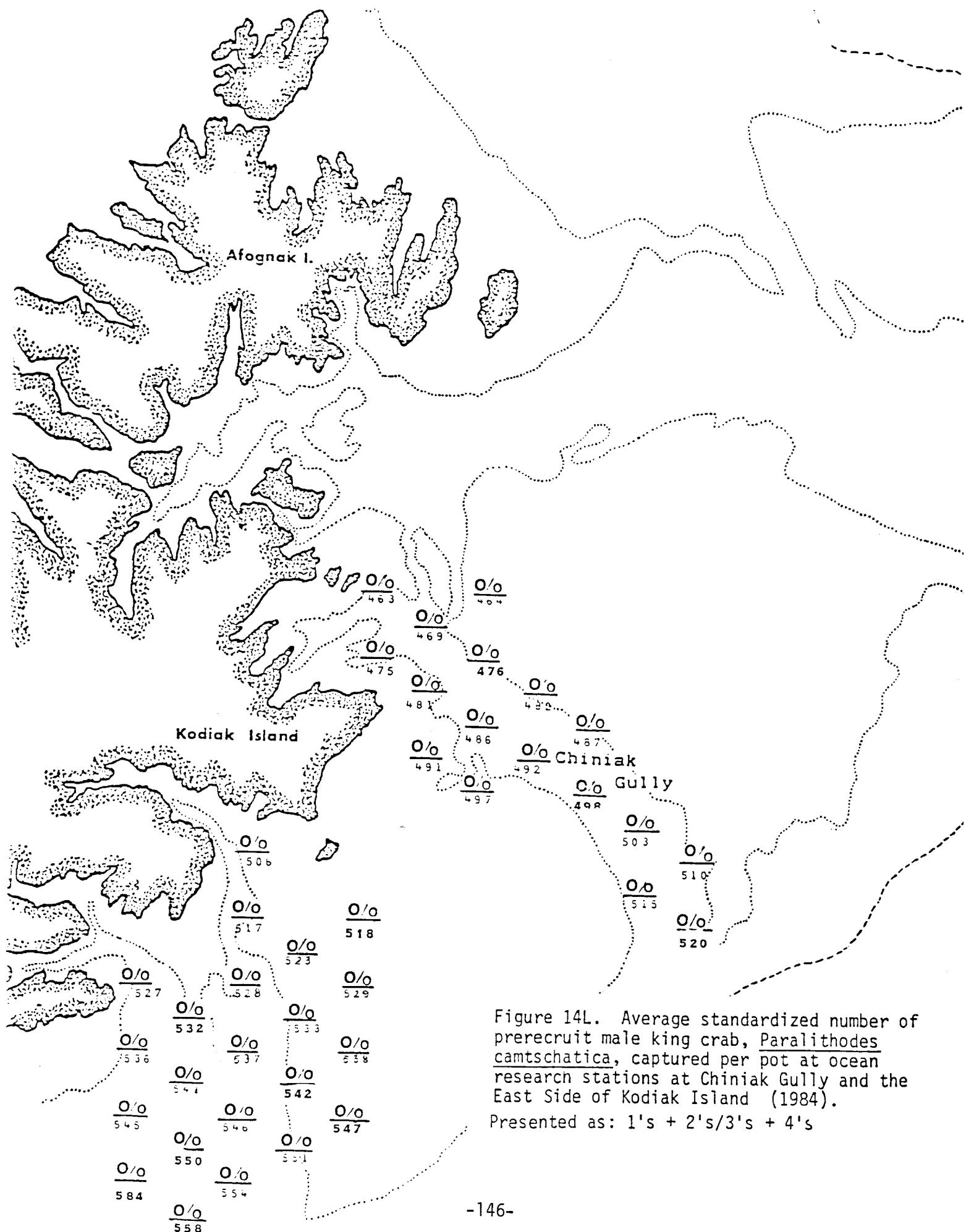


Figure 14L. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1984).

Presented as: 1's + 2's/3's + 4's

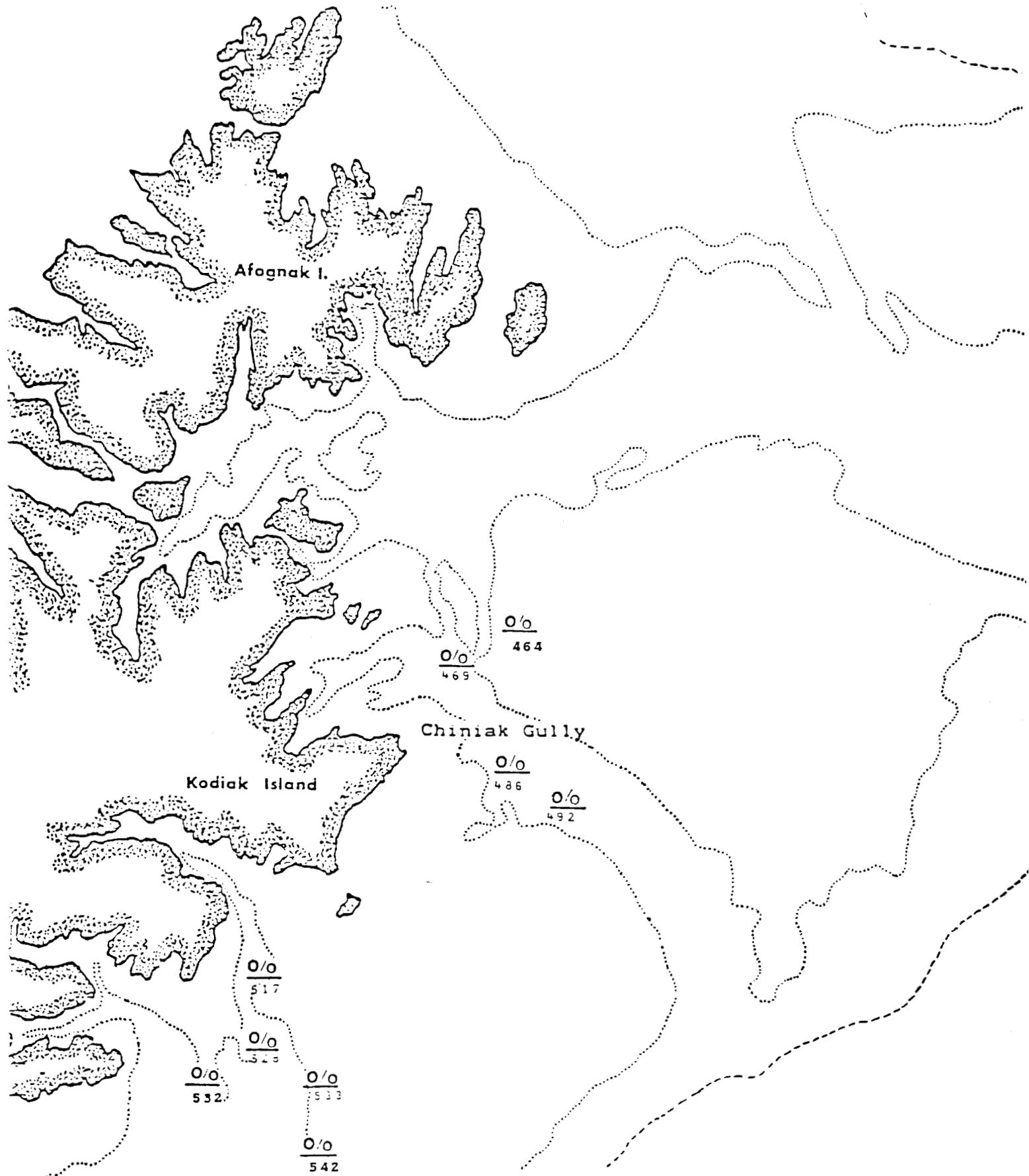


Figure 14m. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1985).

Presented as: 1's + 2's/3's + 4's

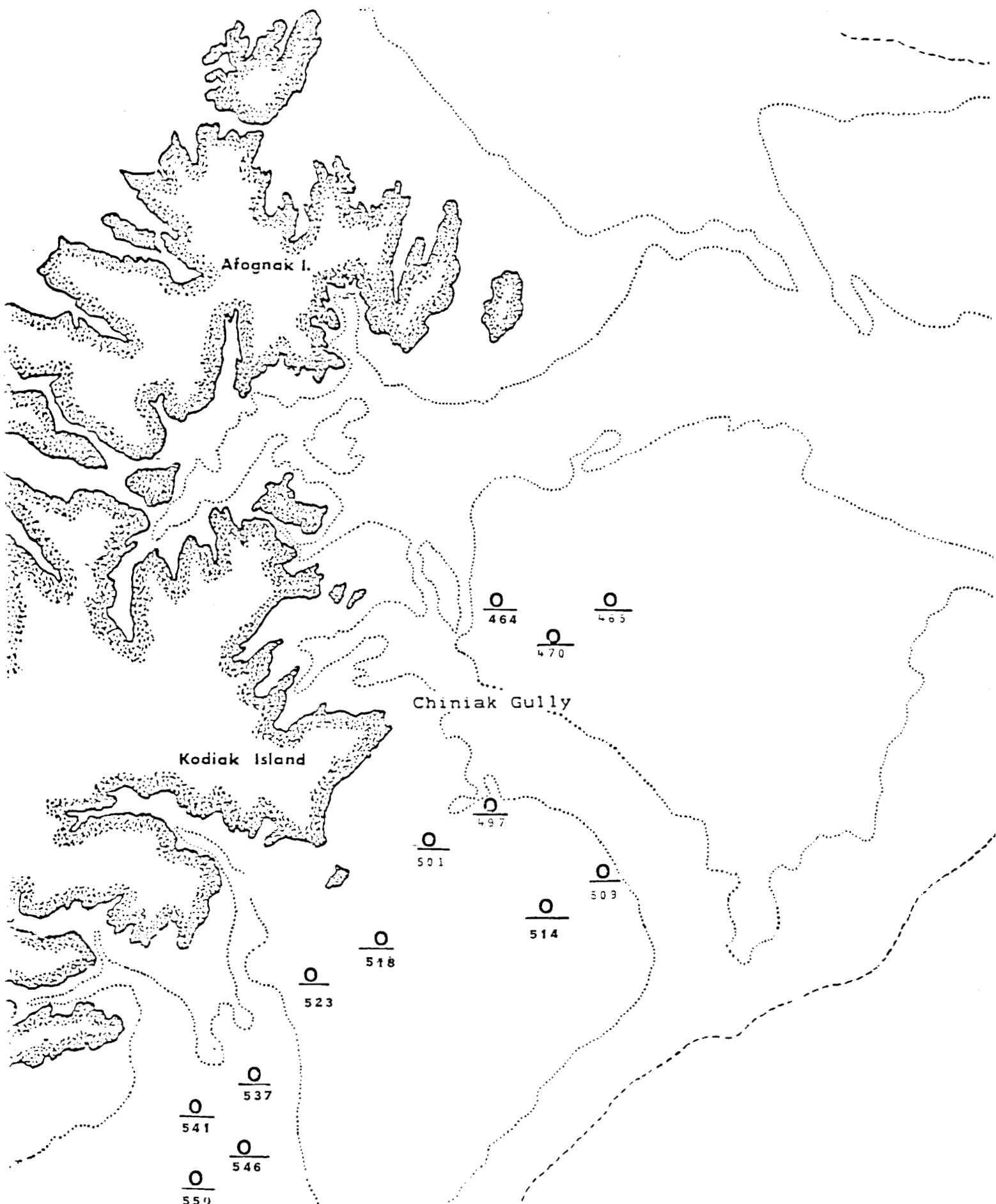


Figure 15a. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1972).

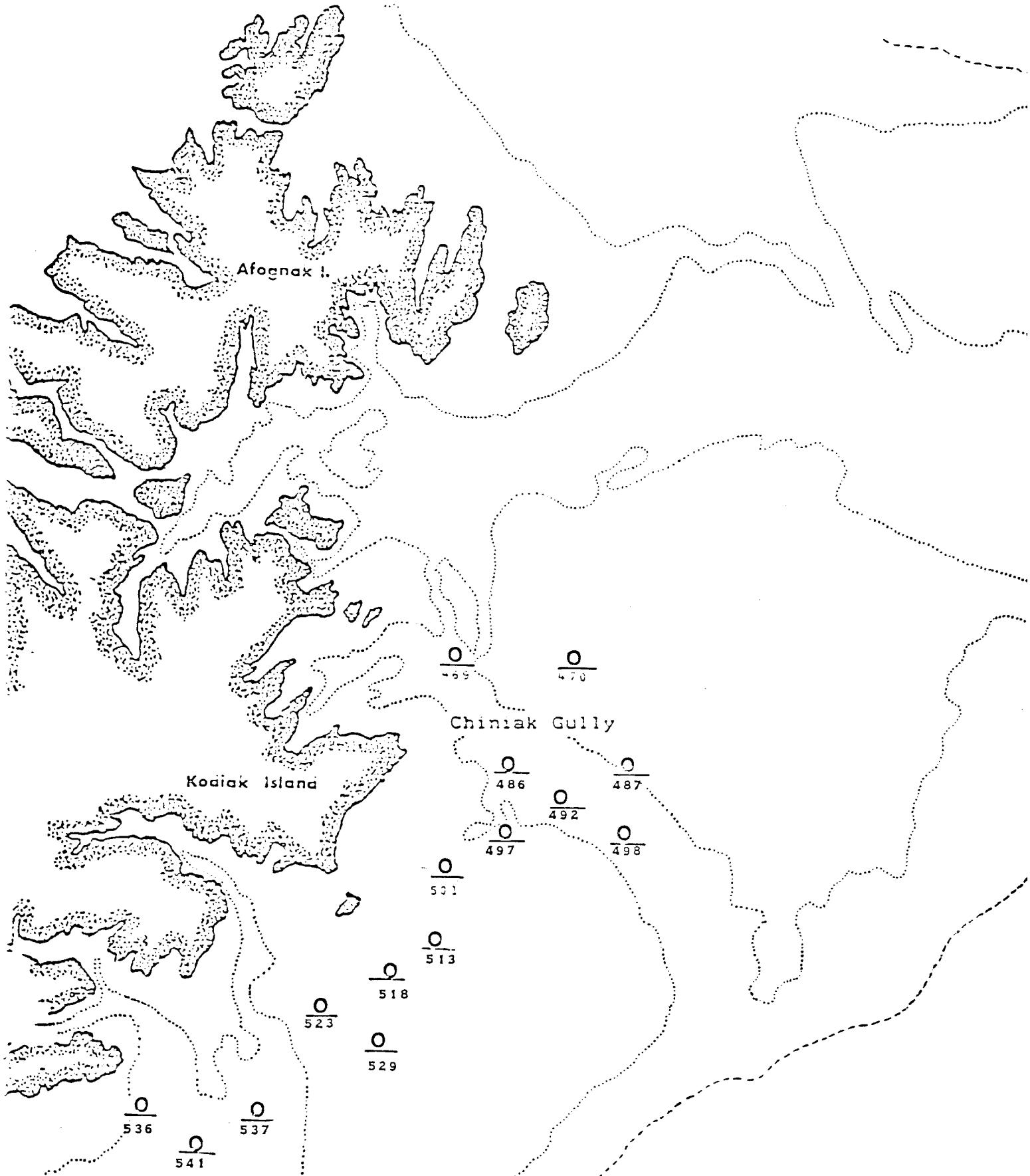


Figure 15b. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1973).

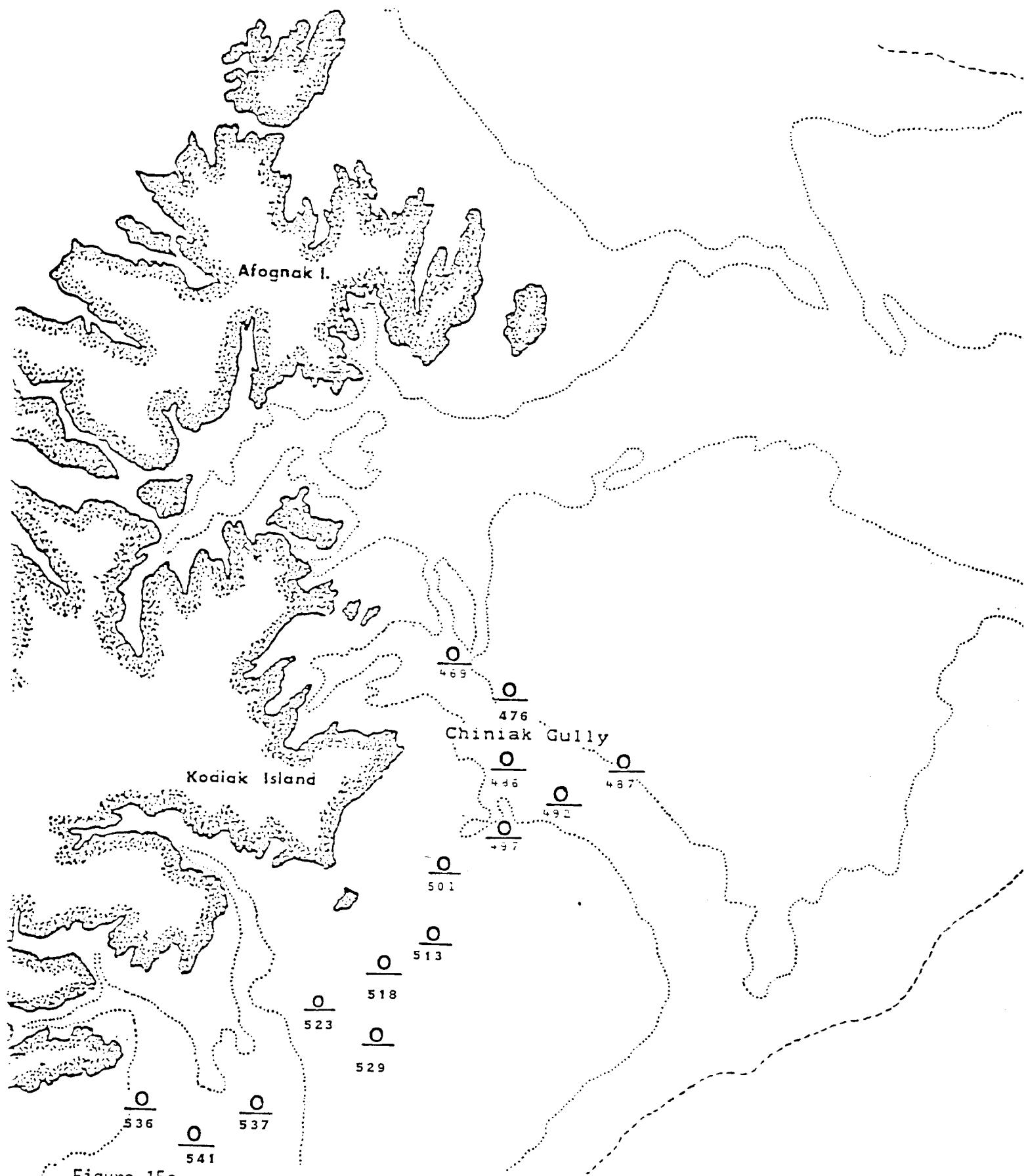


Figure 15c. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1974).

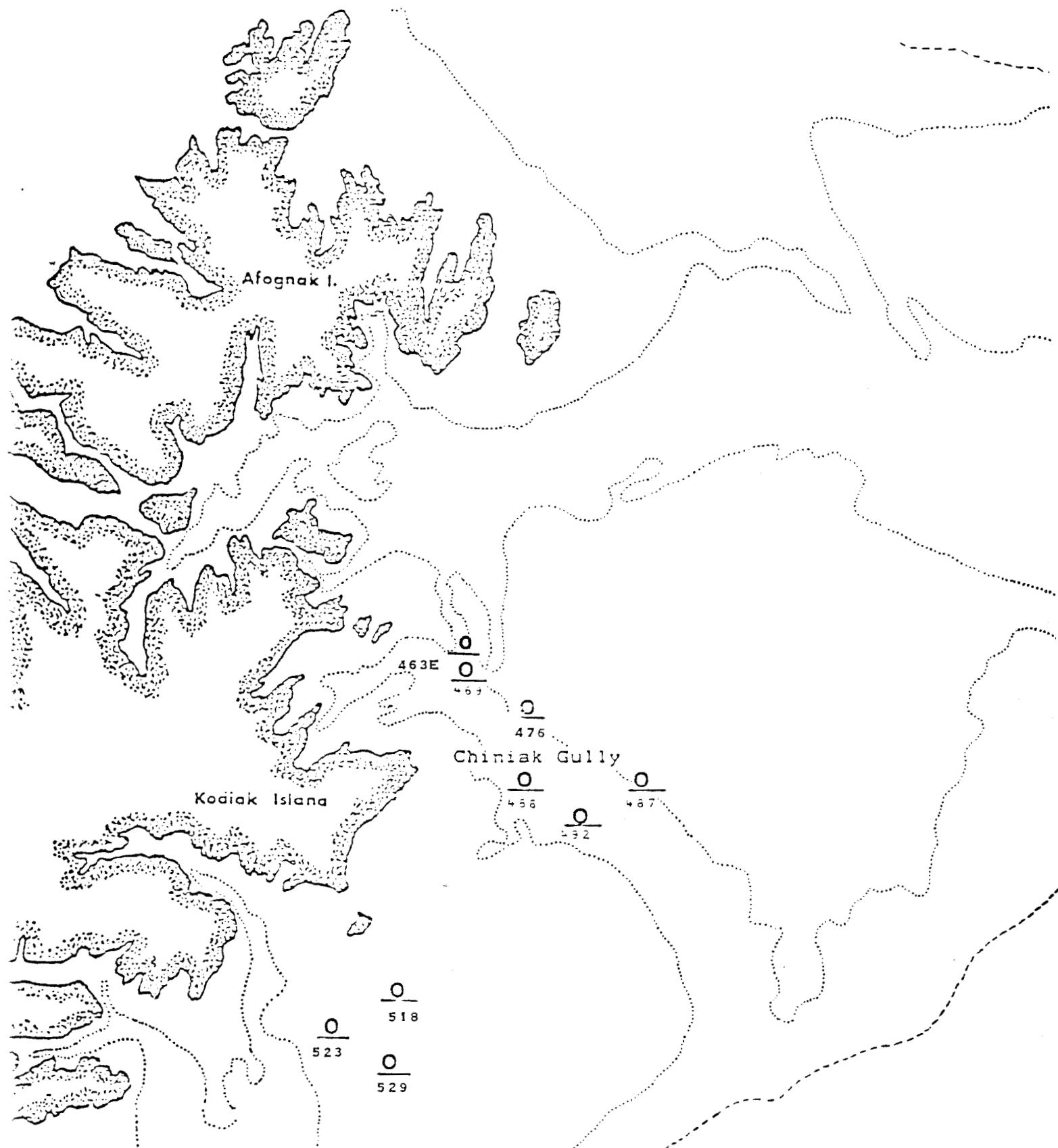


Figure 15d. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1975).

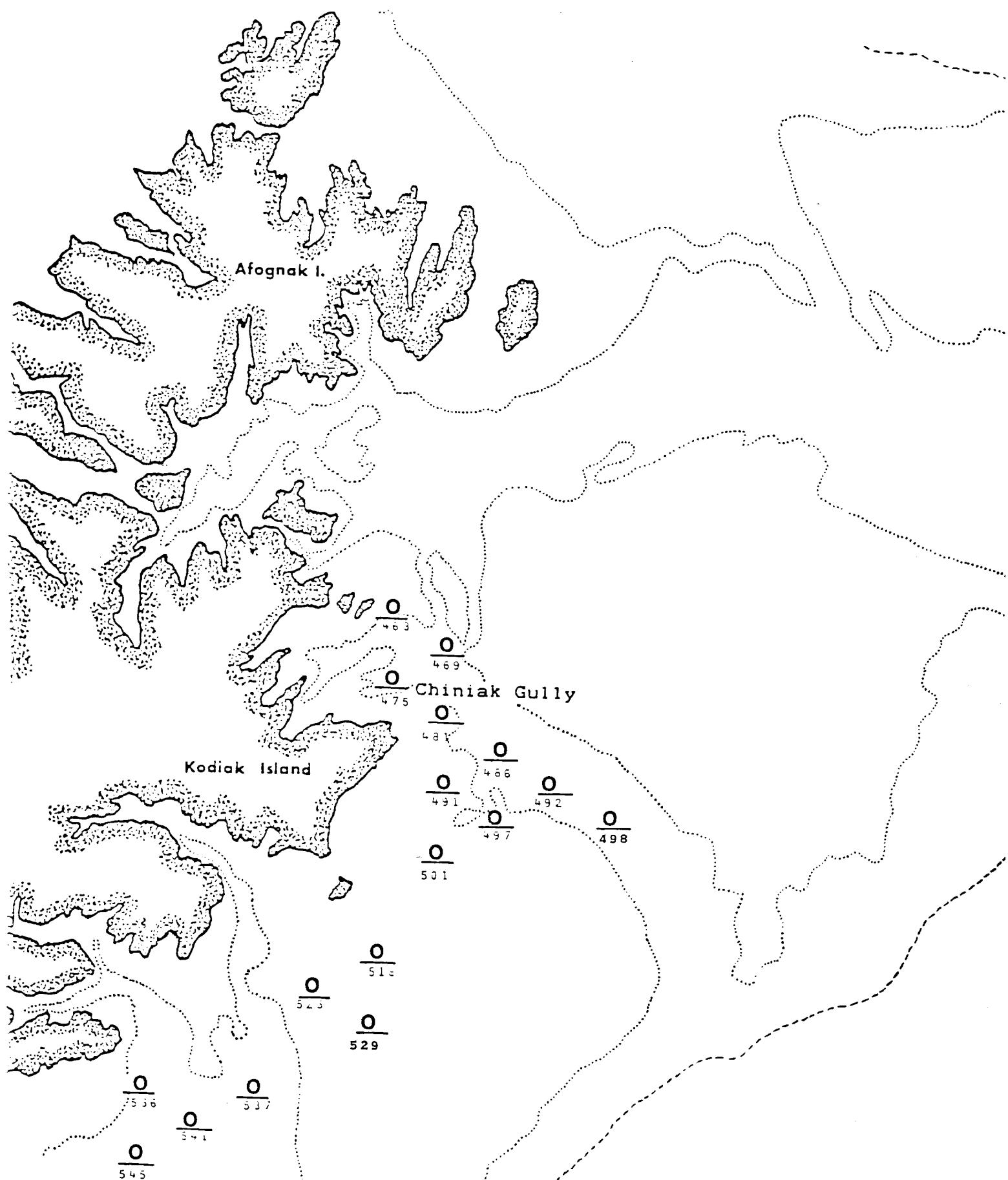


Figure 15e. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1976).

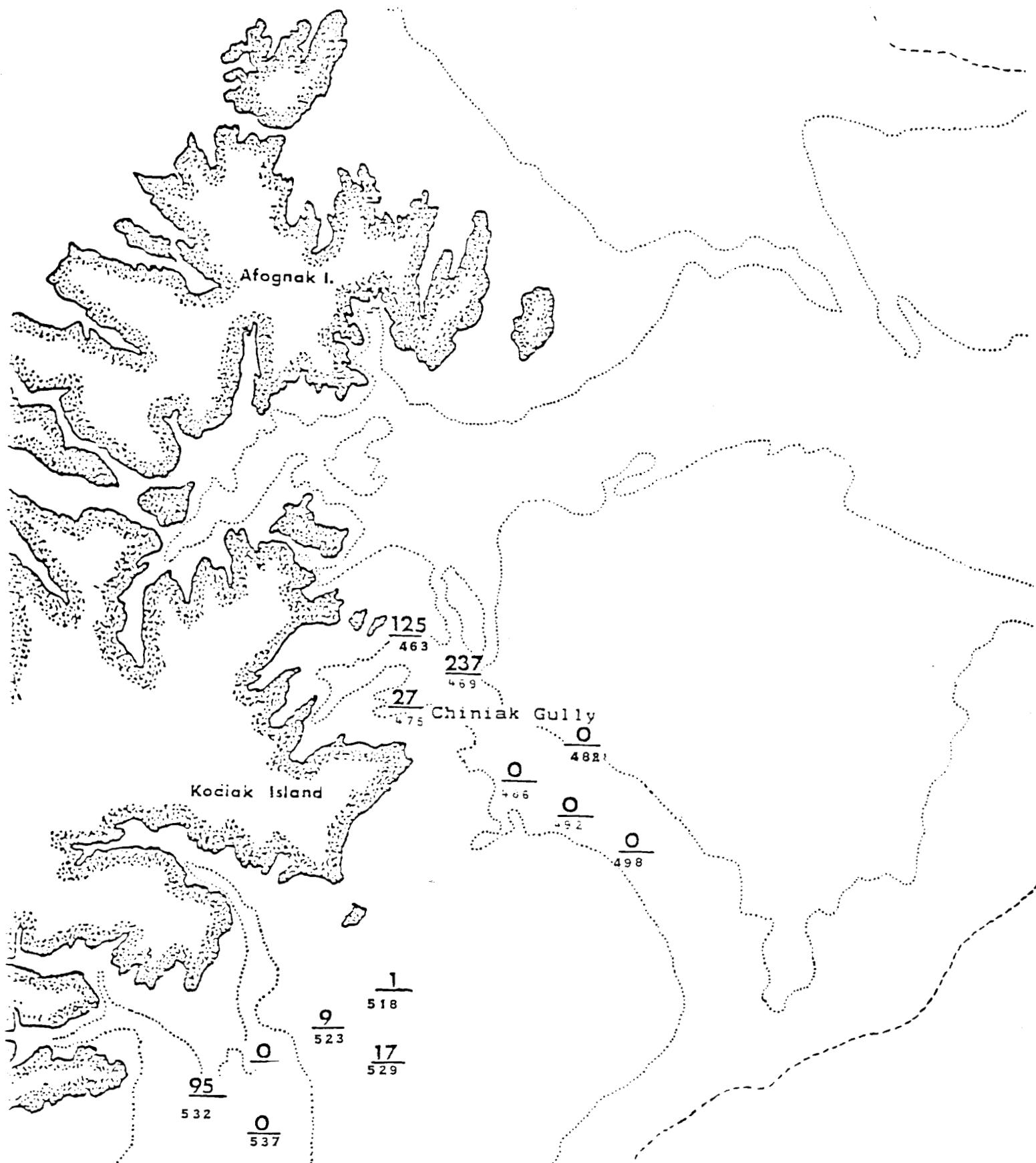


Figure 15f. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1977).

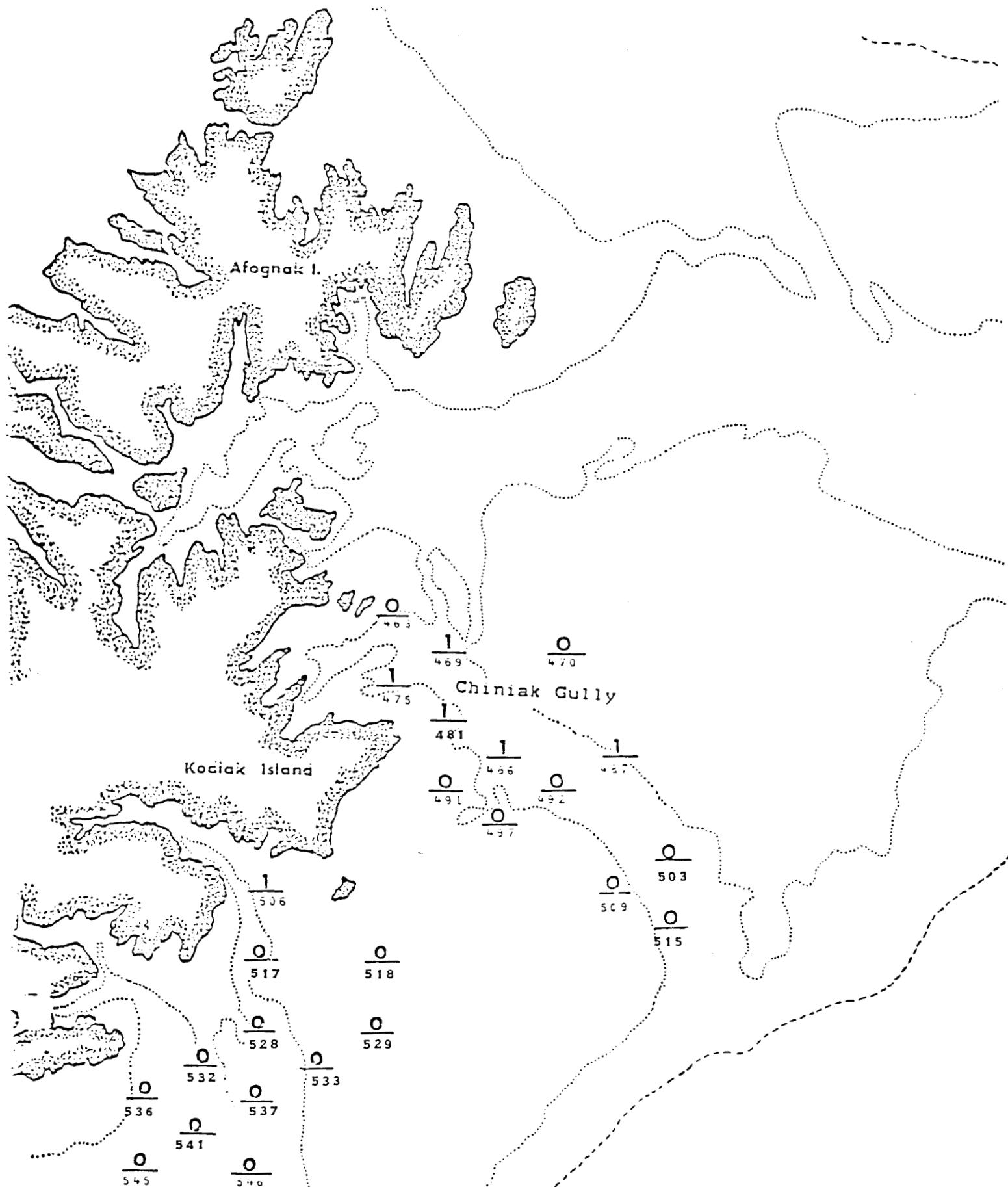


Figure 15g. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1979).

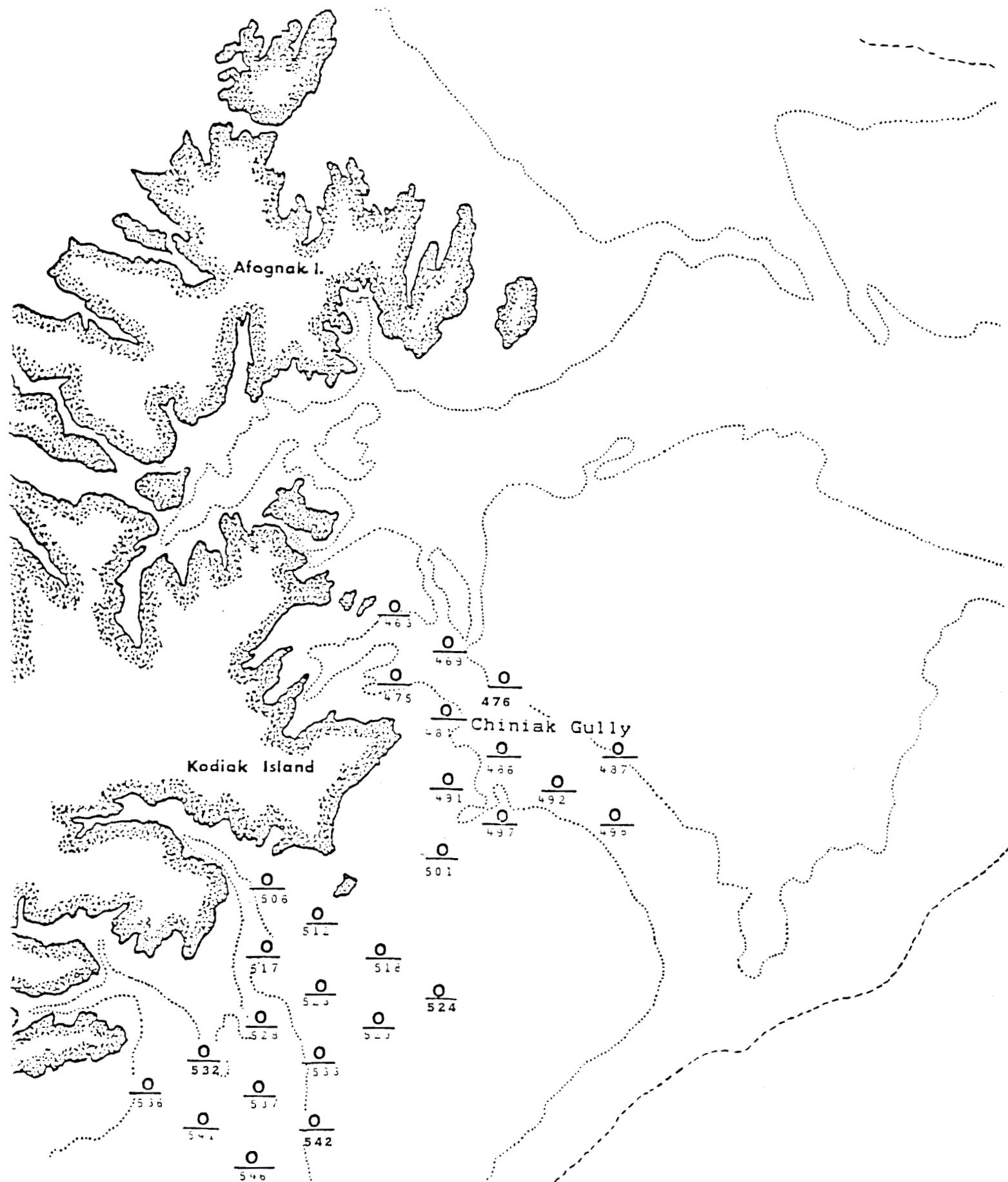


Figure 15h. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1980).



Figure 15i. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1981).

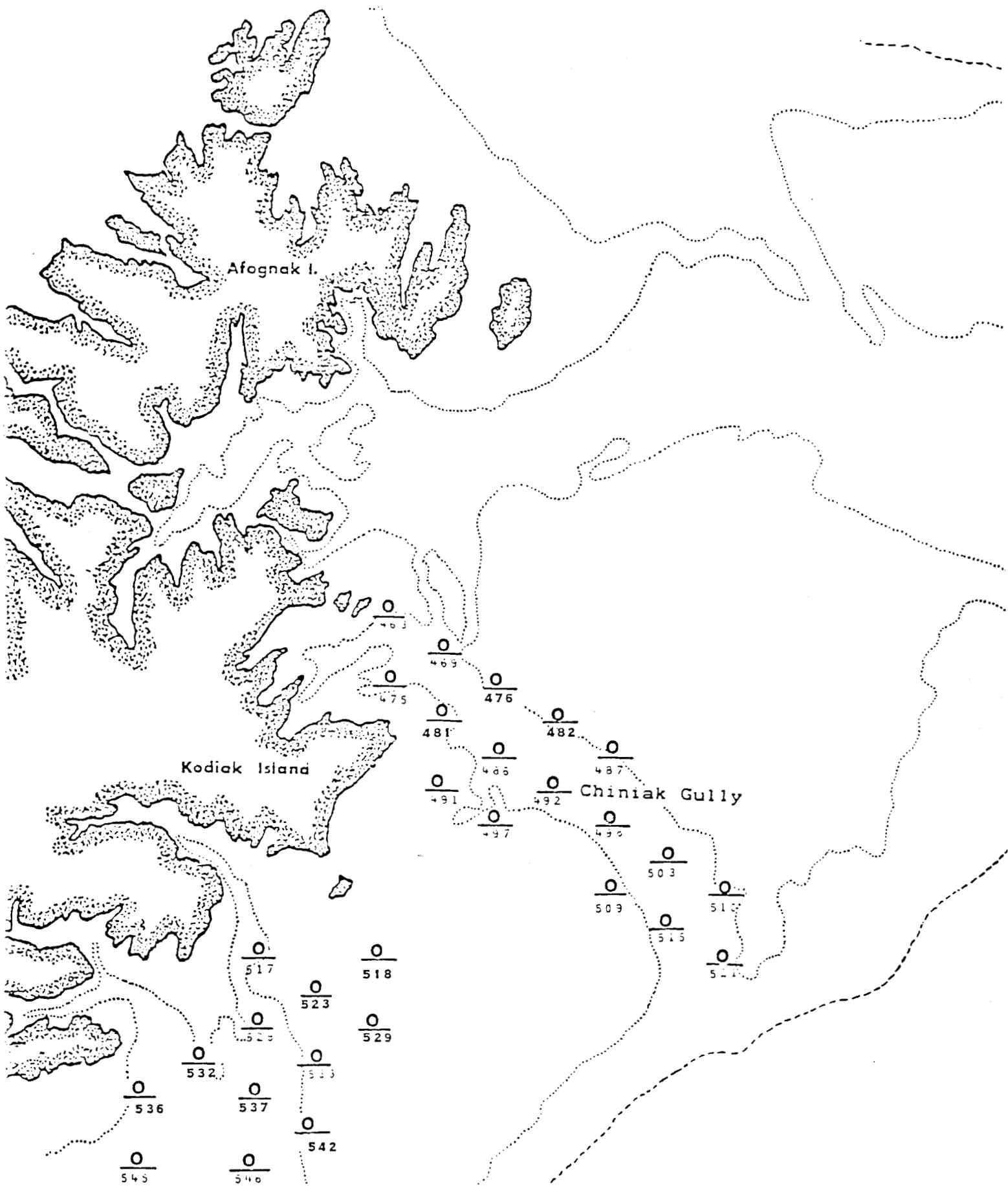


Figure 15j. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1982).

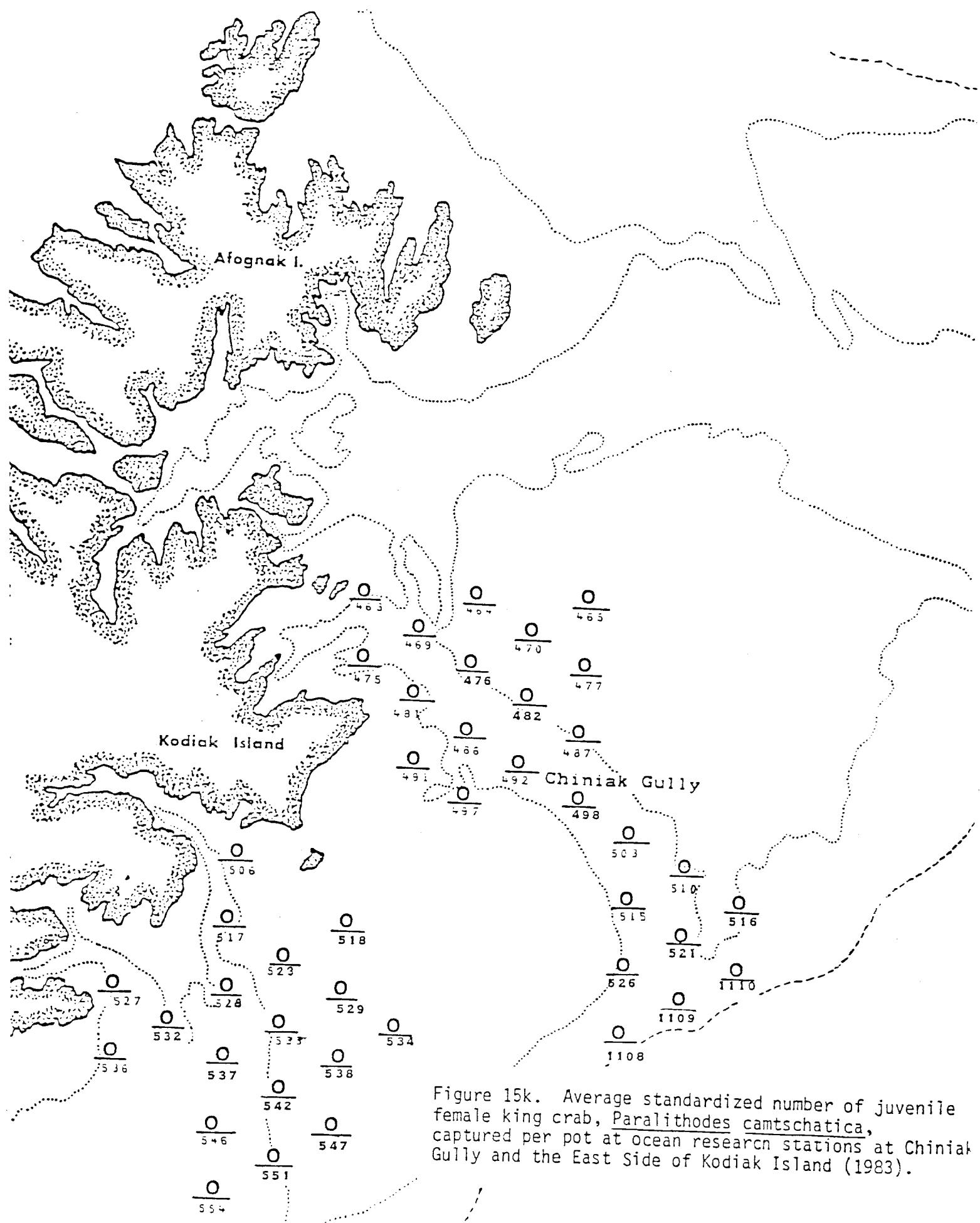


Figure 15k. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1983).

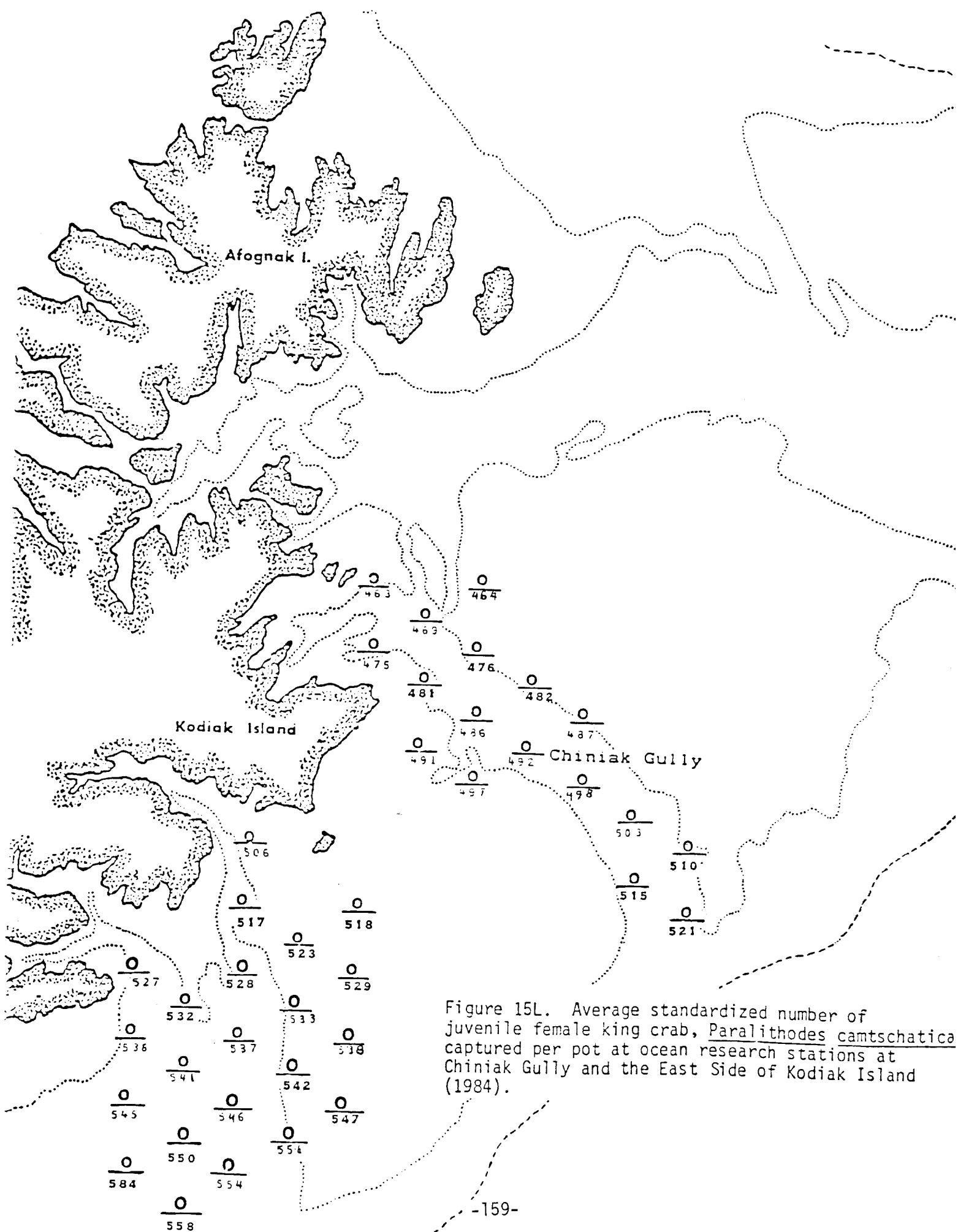


Figure 15L. Average standardized number of juvenile female king crab, *Paralithodes camtschatica* captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1984).

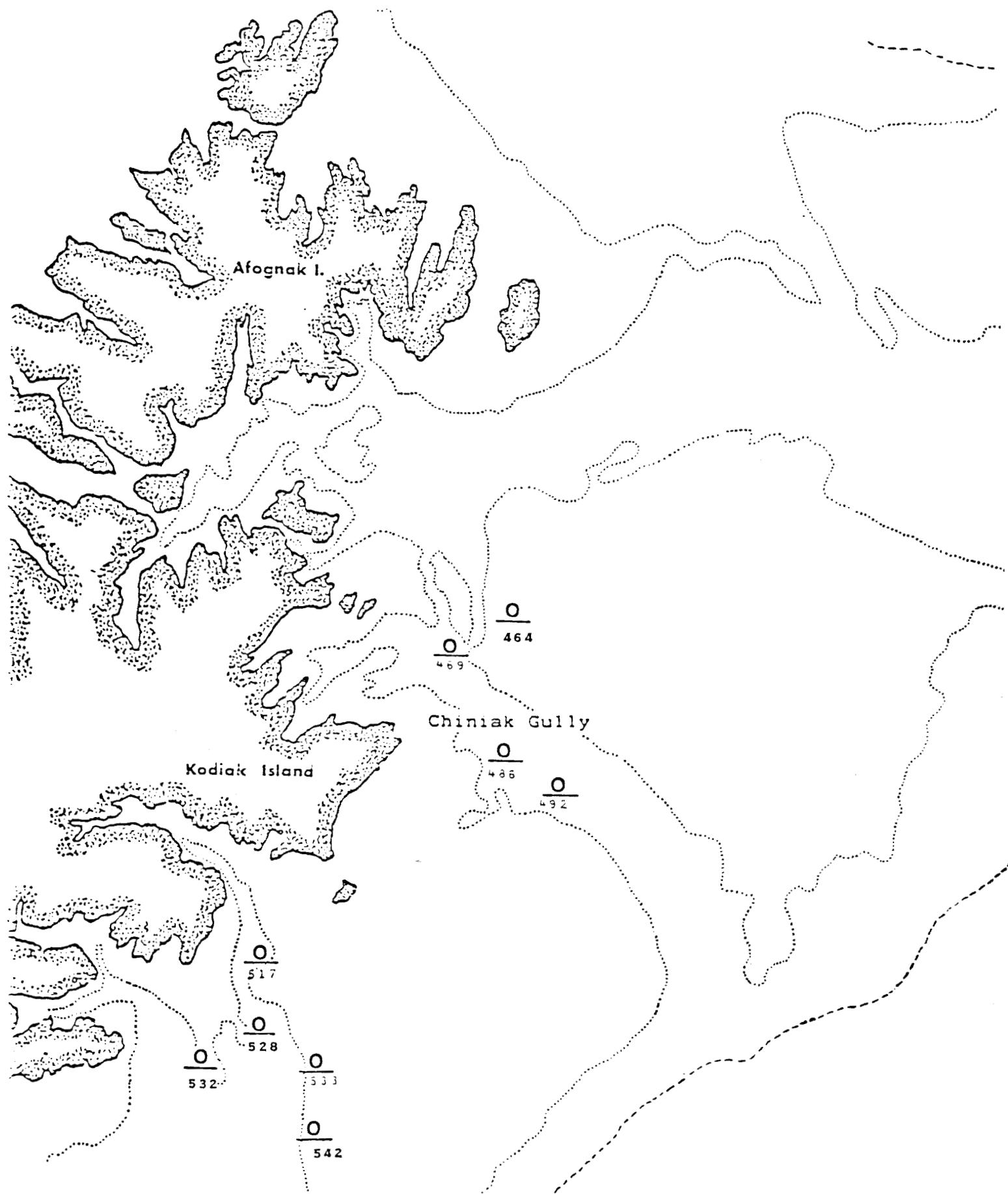


Figure 15m. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at Chiniak Gully and the East Side of Kodiak Island (1985).

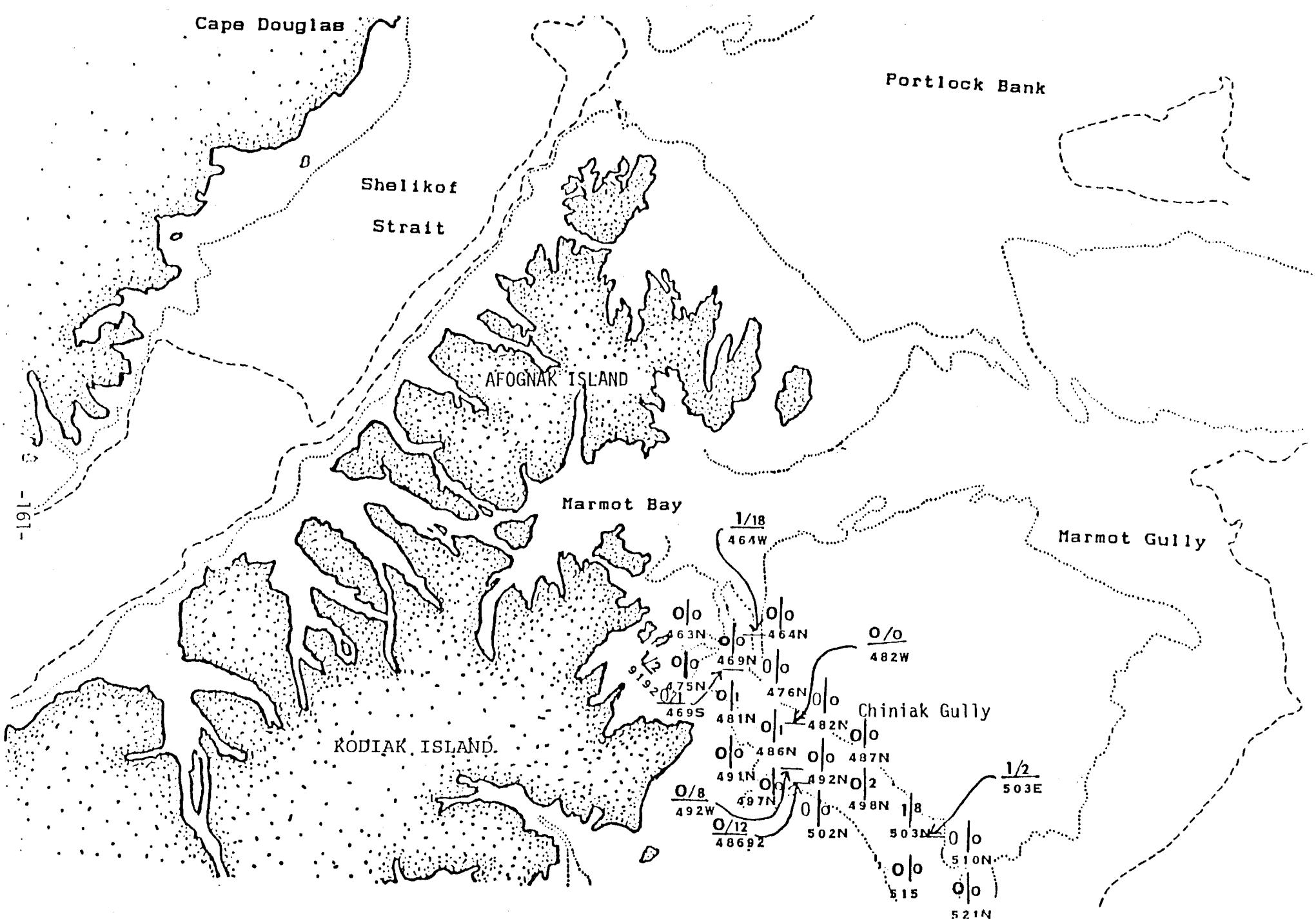


Figure 16. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at non-standard ocean research stations at Chiniak Gully, Kodiak Island (1984).

Presented as: Legal males/Adult females

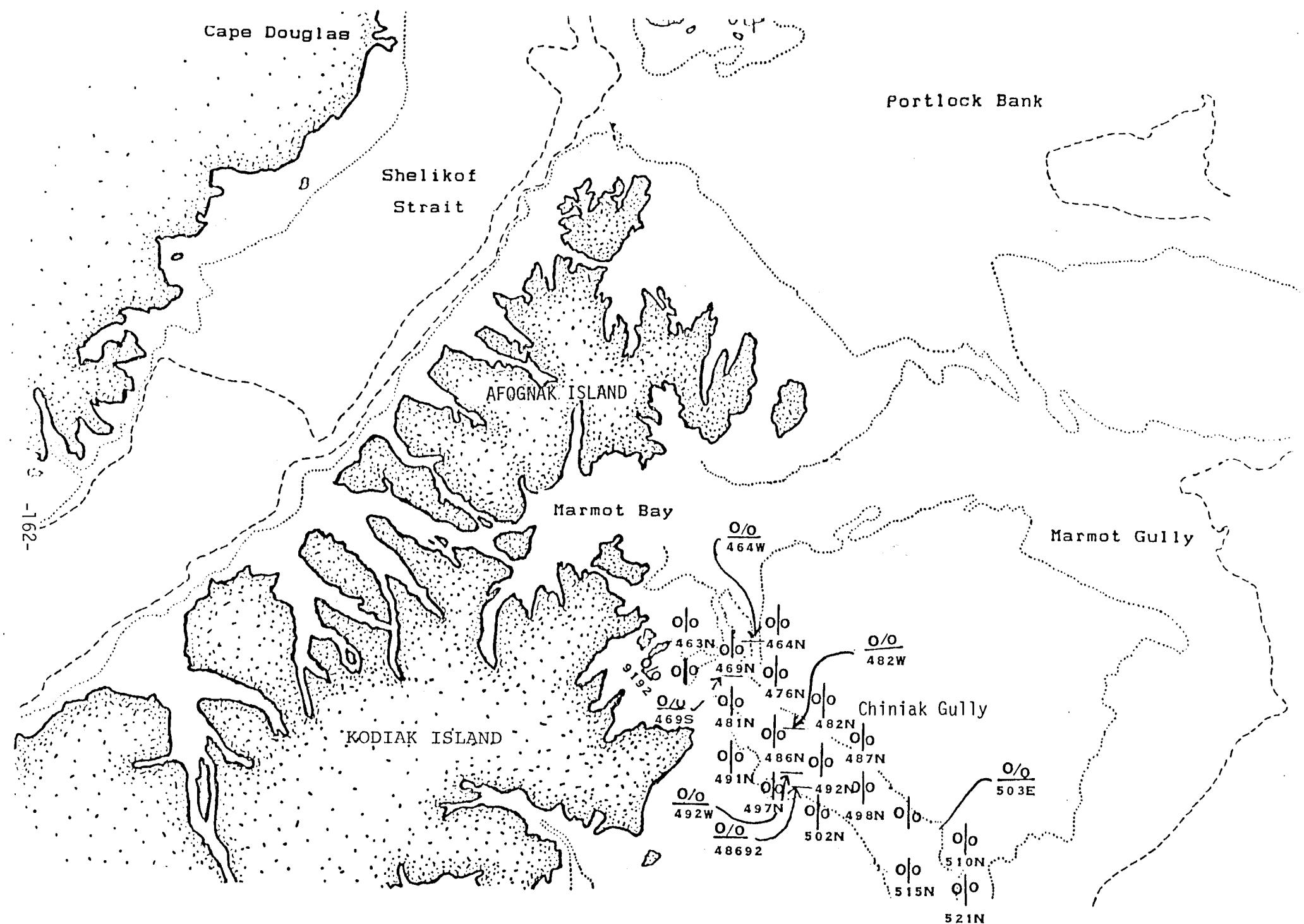


Figure 17. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at non-standard ocean research stations at Chiniak Gully, Kodiak Island (1984).

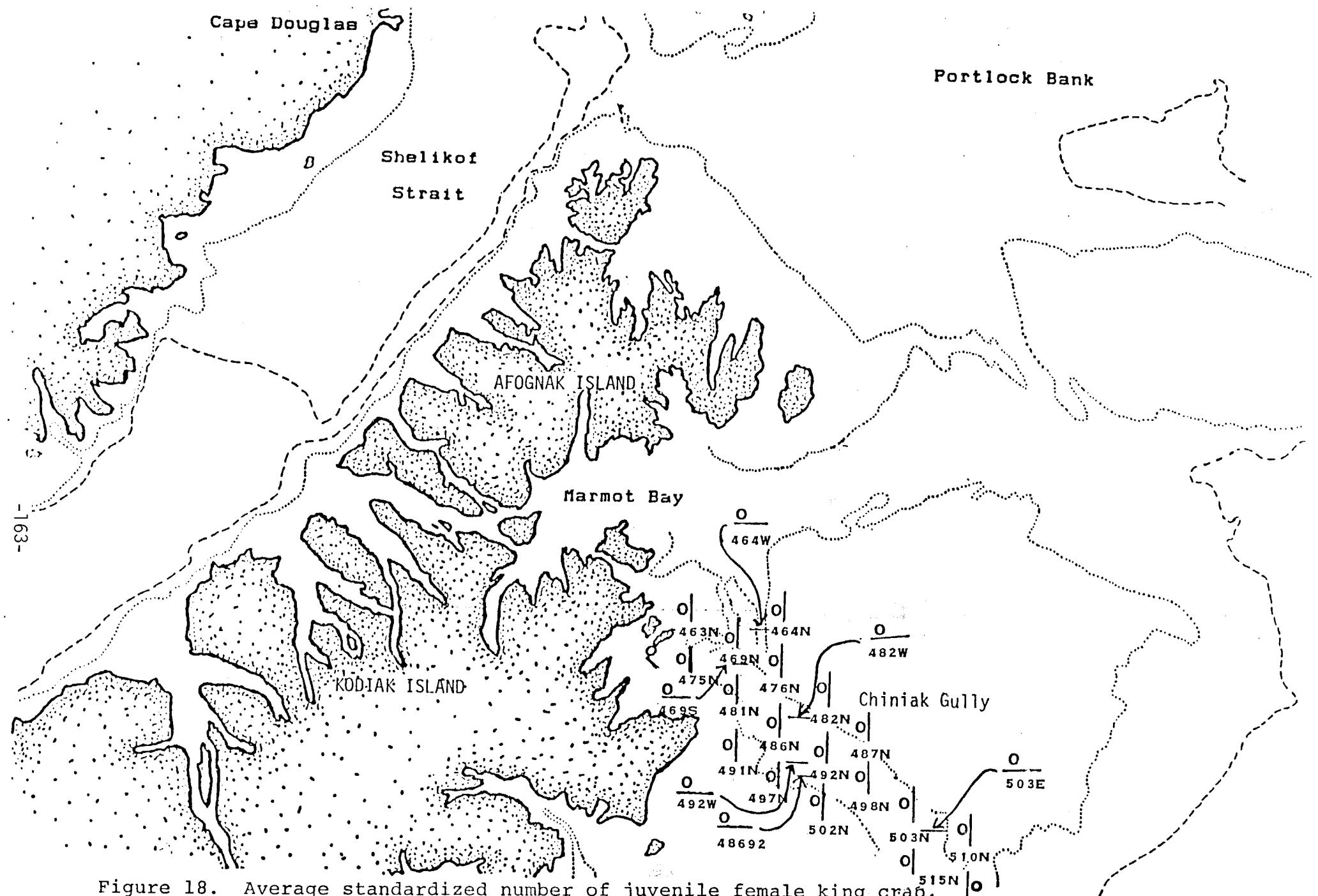


Figure 18. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at non-standard ocean research stations at Chiniak Gully, Kodiak Island (1984).

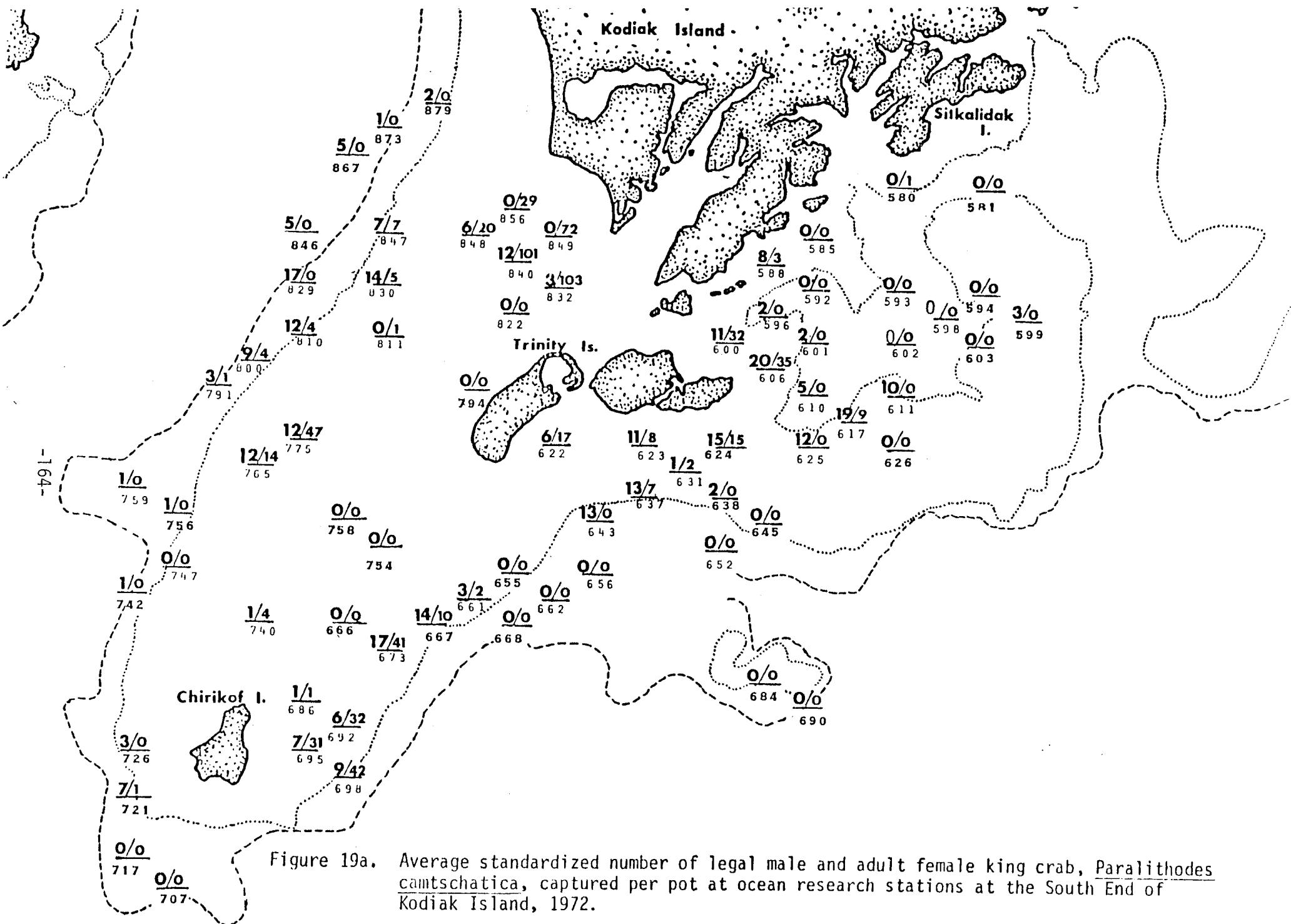


Figure 19a. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1972.

Presented as: Legal males/Adult females

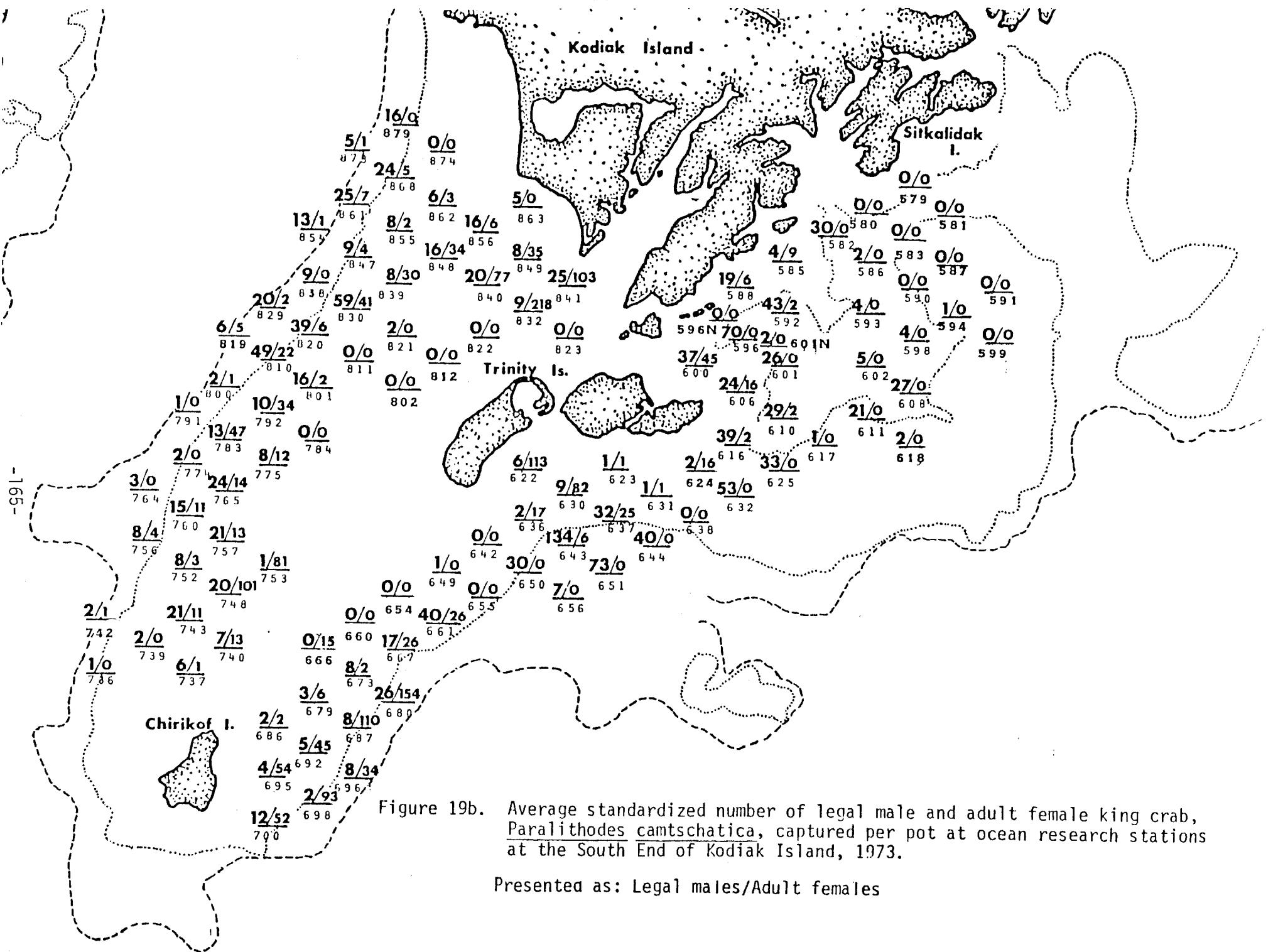


Figure 19b. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1973.

Presented as: Legal males/Adult females

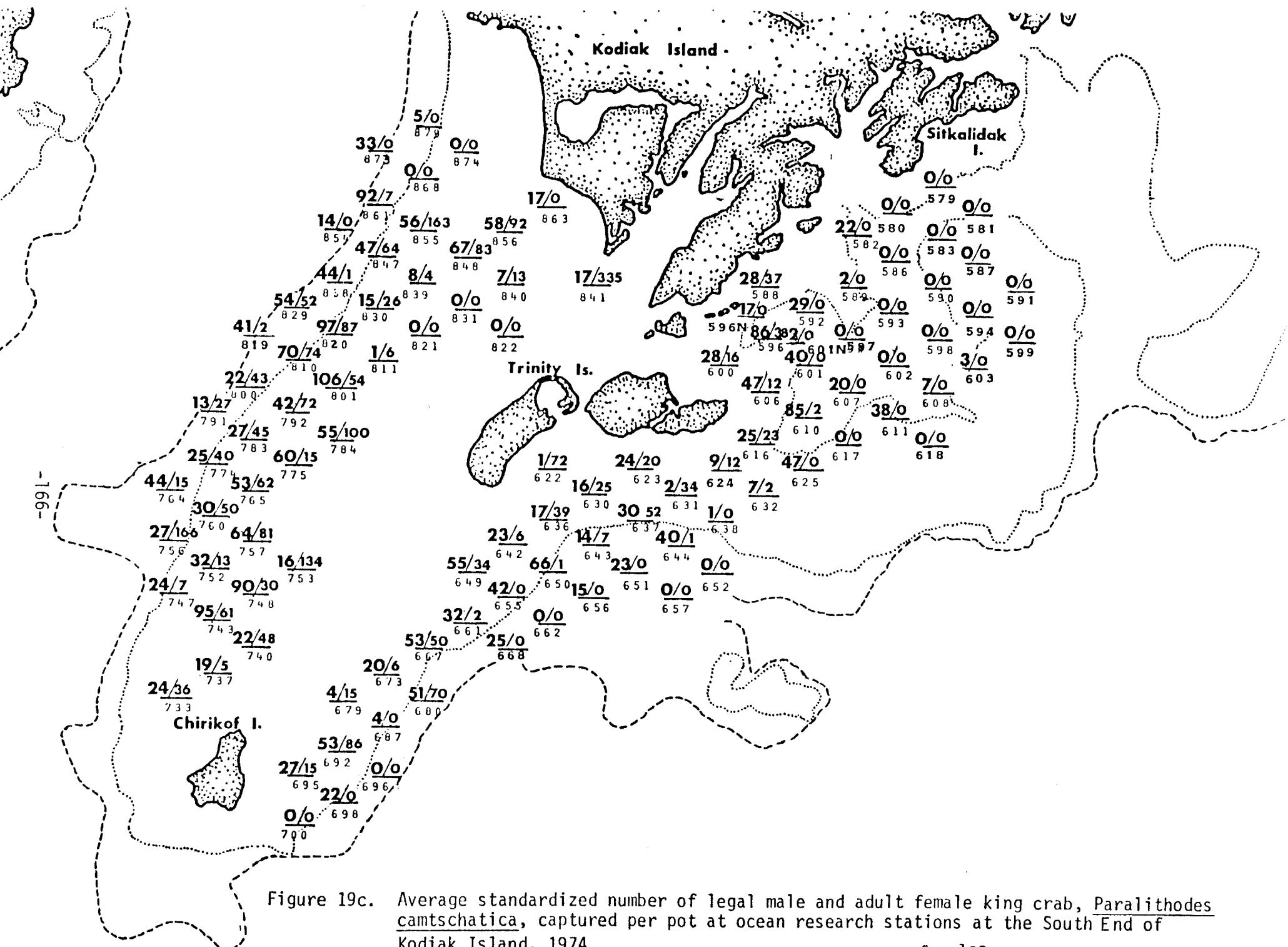


Figure 19c. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1974. Presented as: Legal males/Adult females

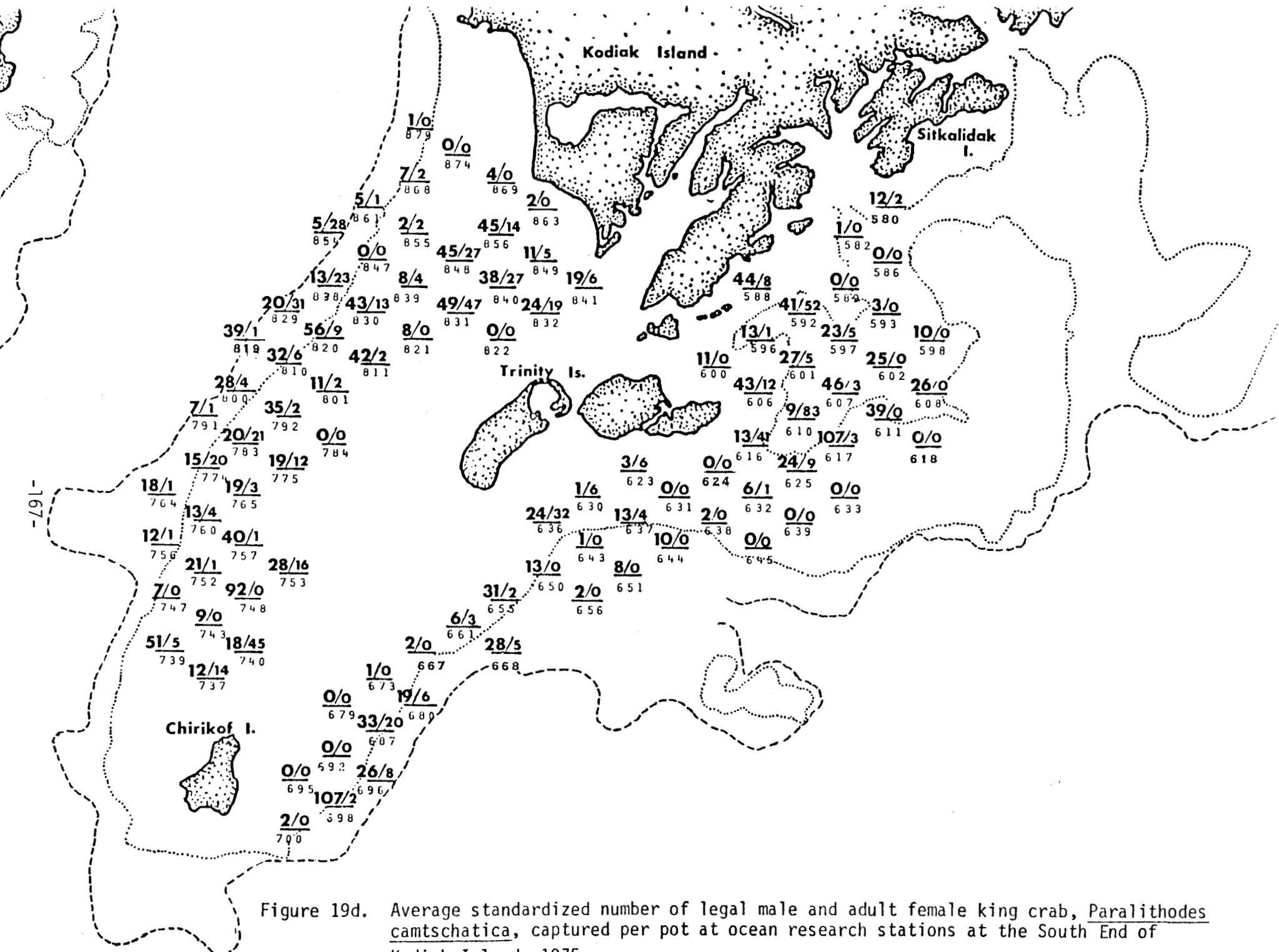


Figure 19d. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1975.

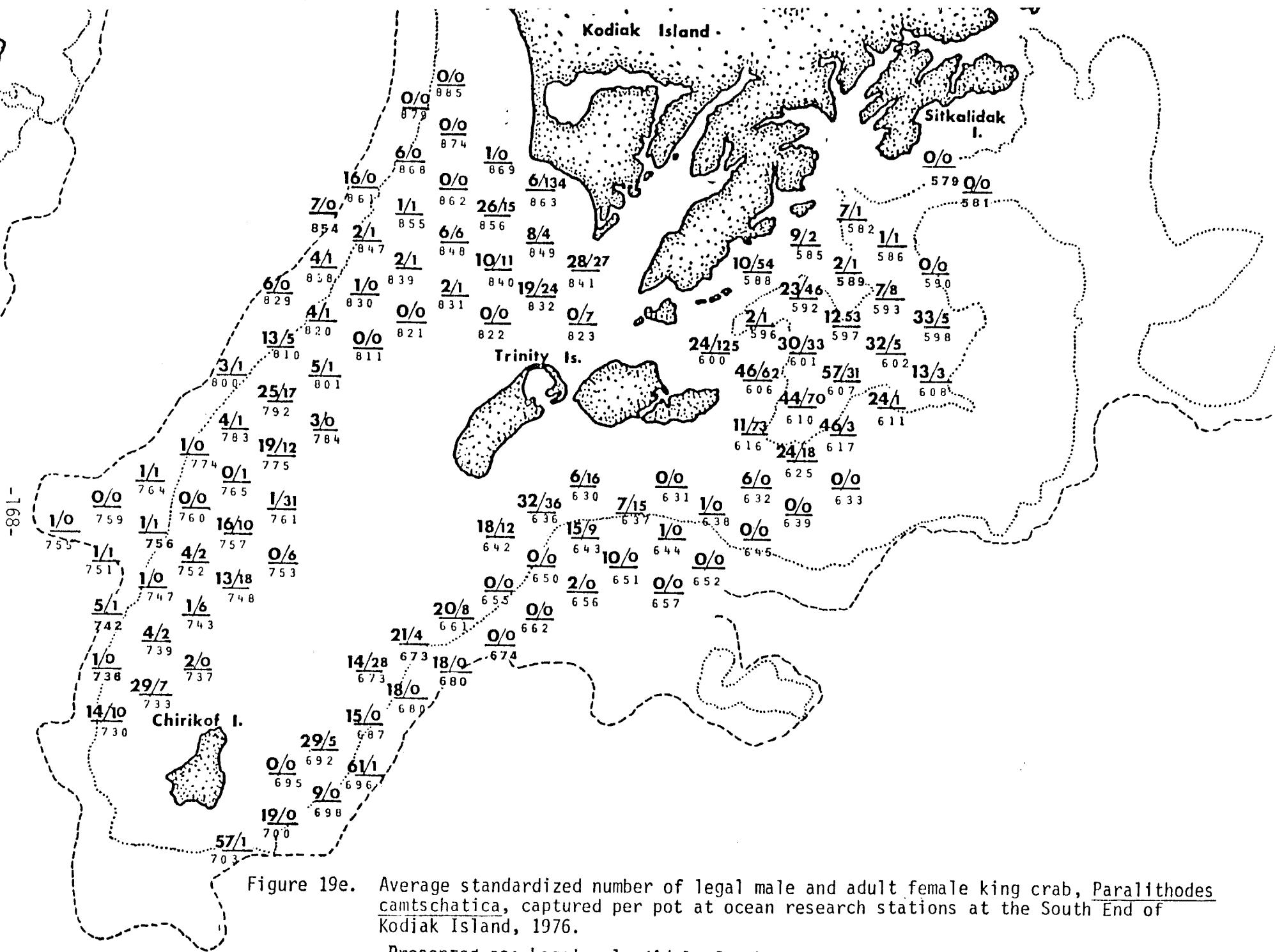


Figure 19e. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1976.

Presented as: Legal males/Adult females

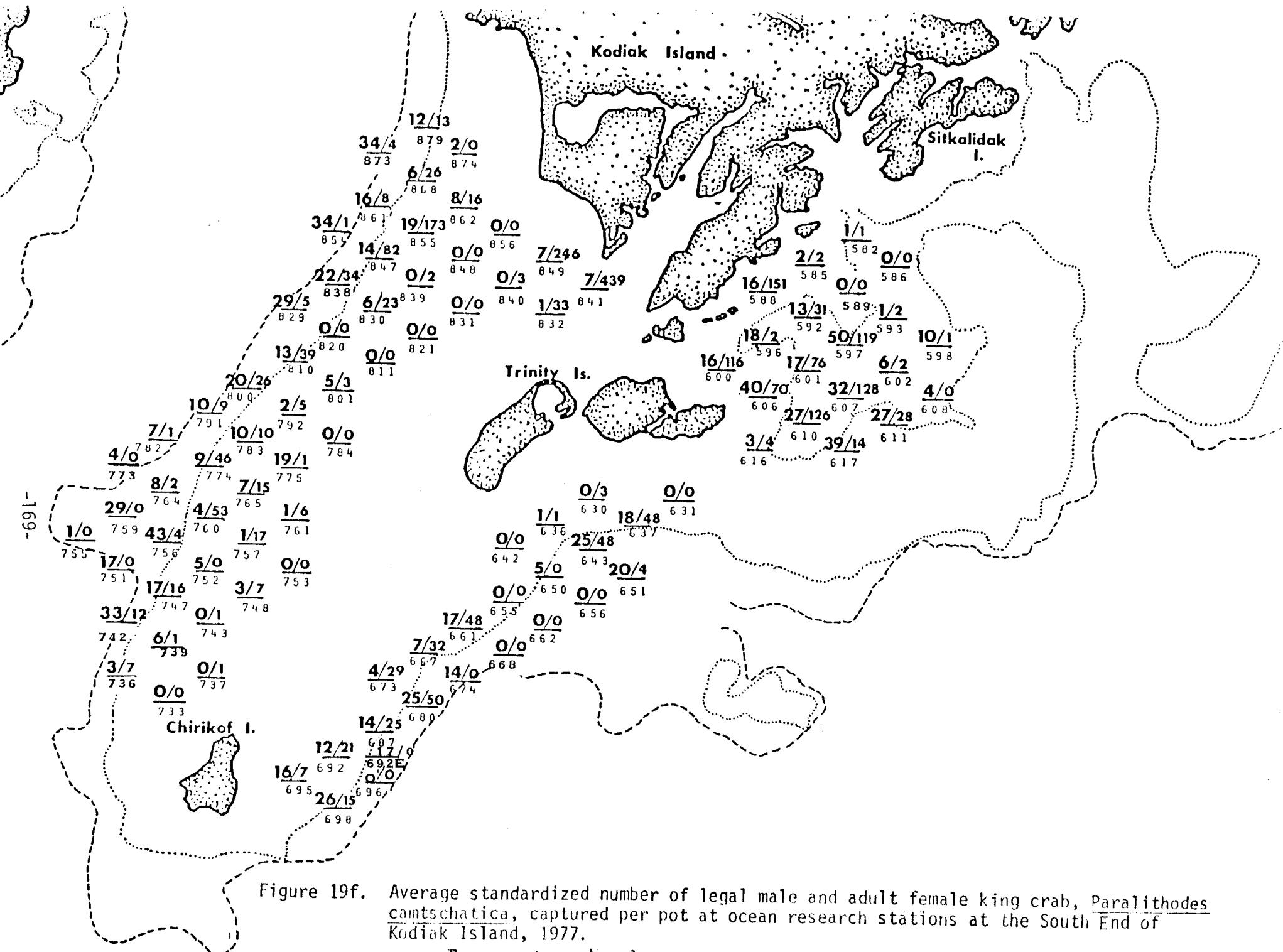


Figure 19f. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1977.

Presented as: Legal males/Adult females

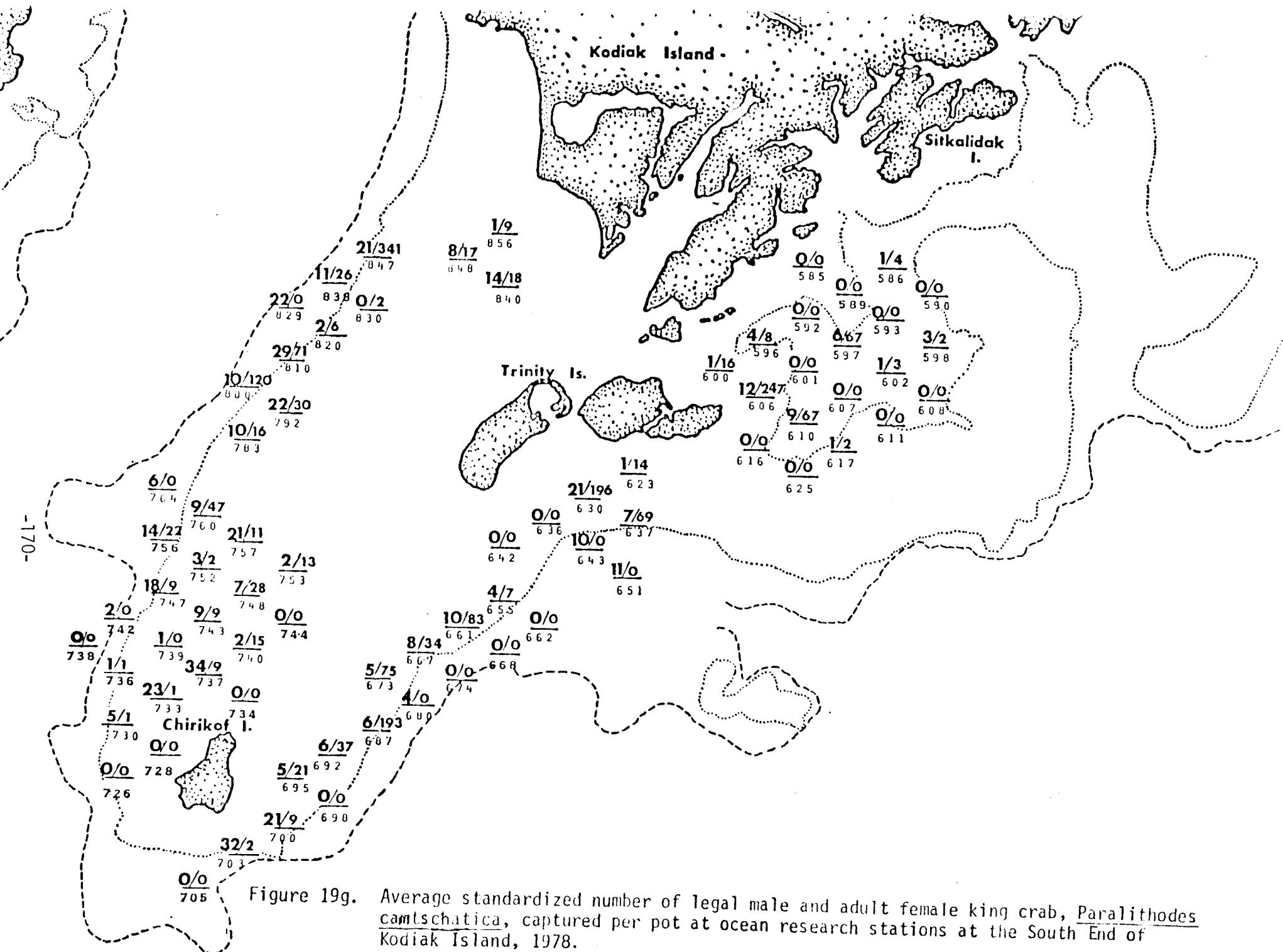


Figure 19g. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1978.

Presented as: Legal males/Adult females

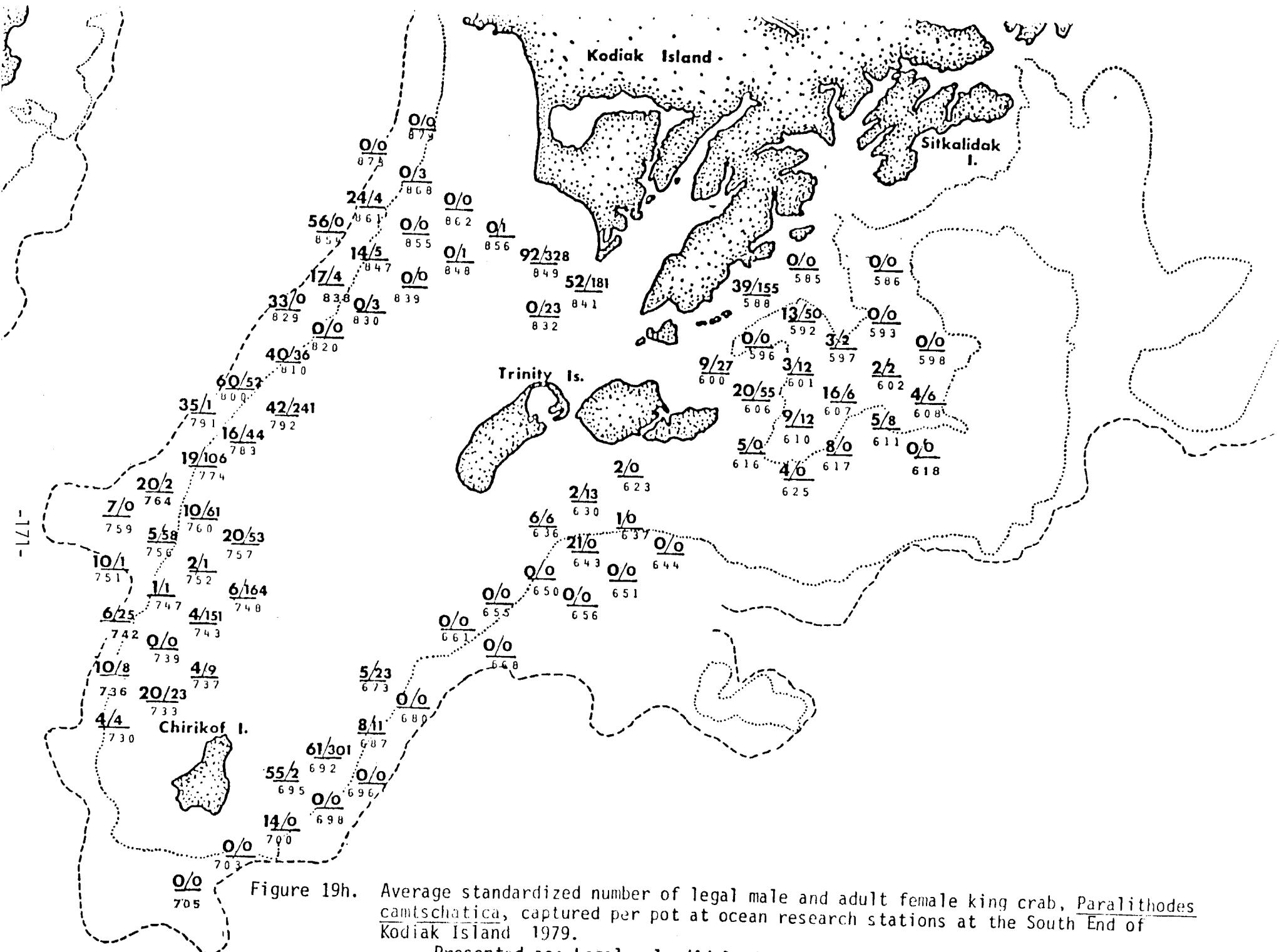


Figure 19h. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island 1979.  
Presented as: Legal males/Adult females

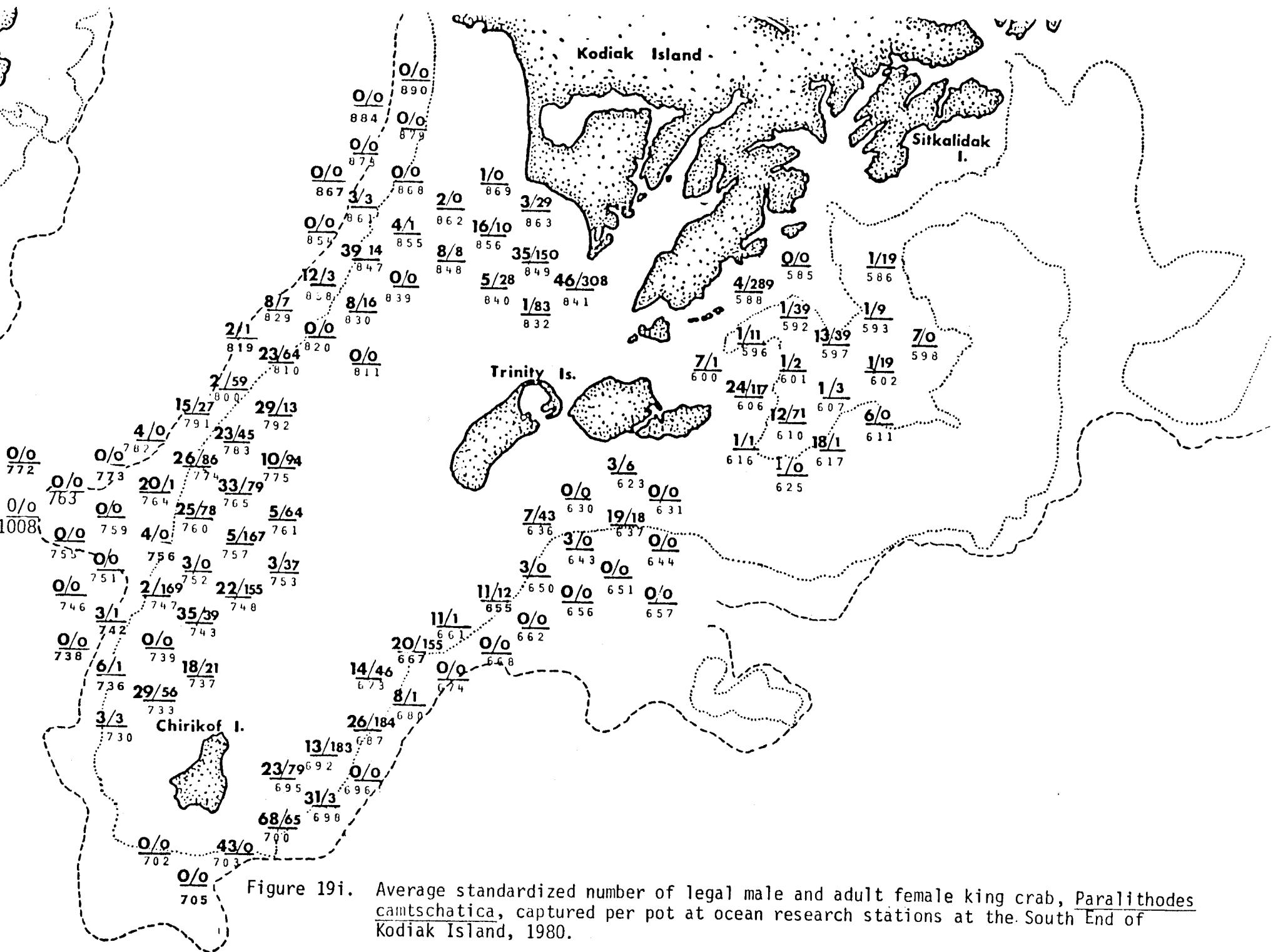


Figure 19i. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1980.

Presented as: Legal males/Adult females

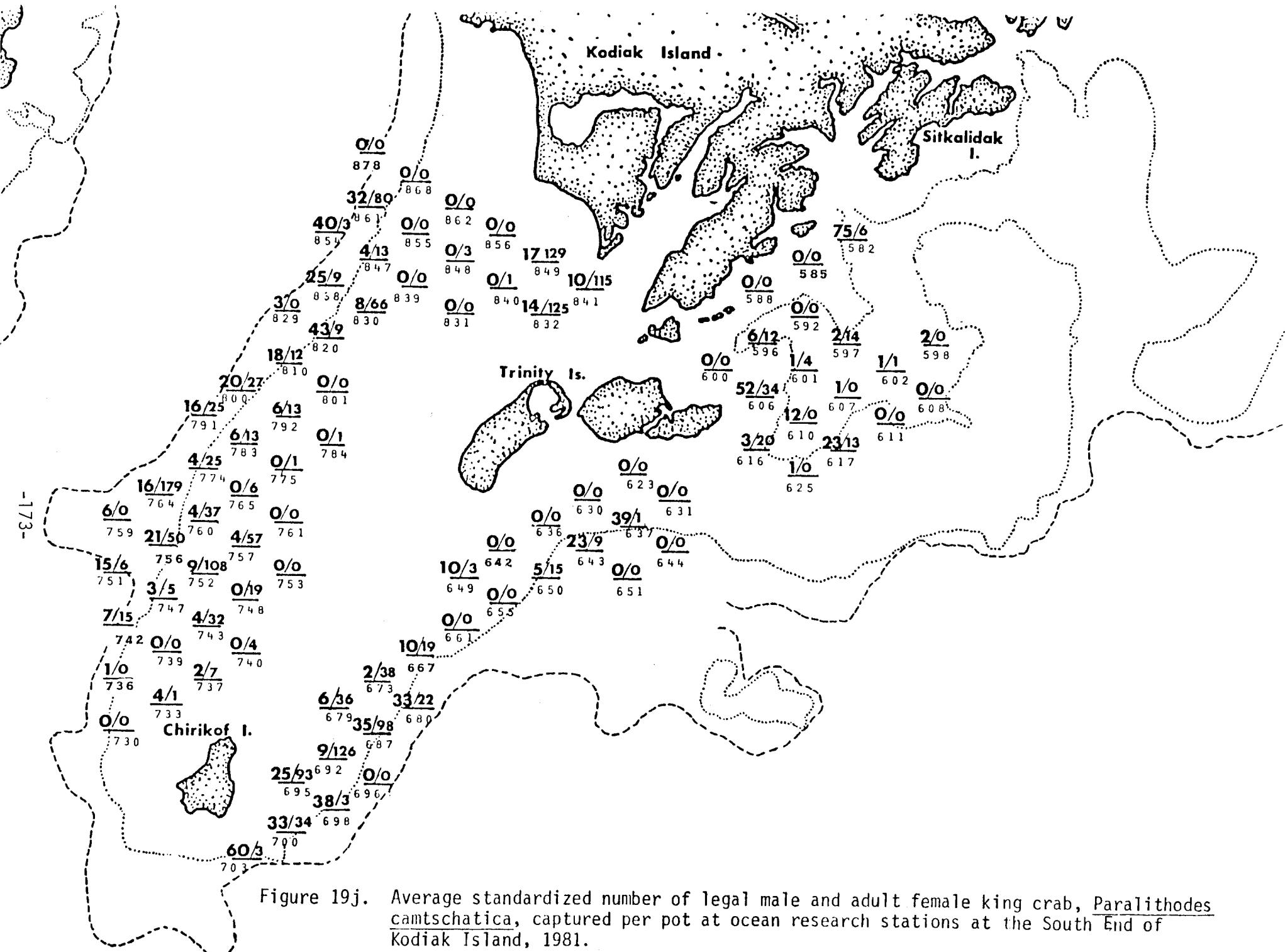


Figure 19j. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1981.

Presented as: Legal males/Adult females

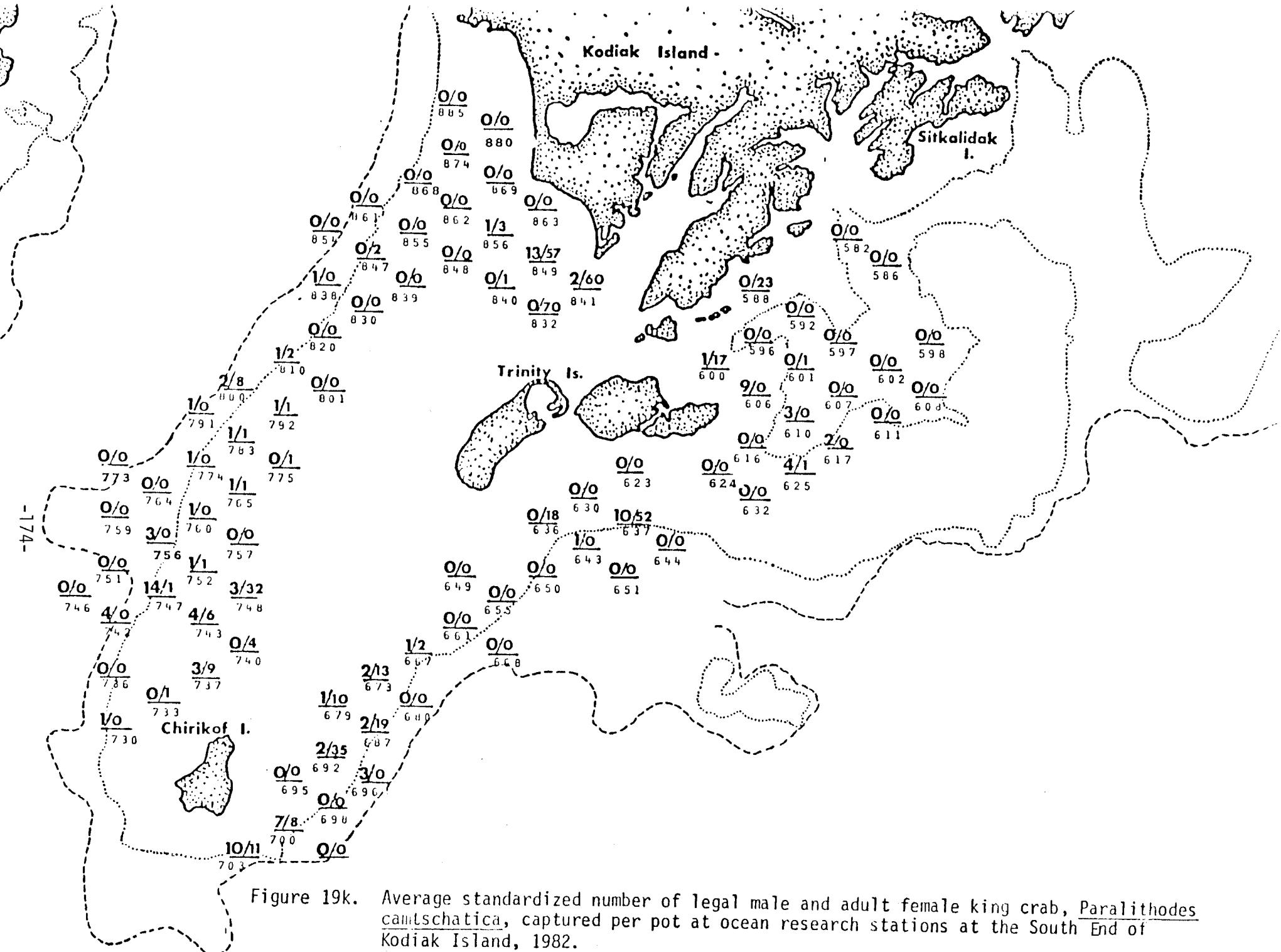
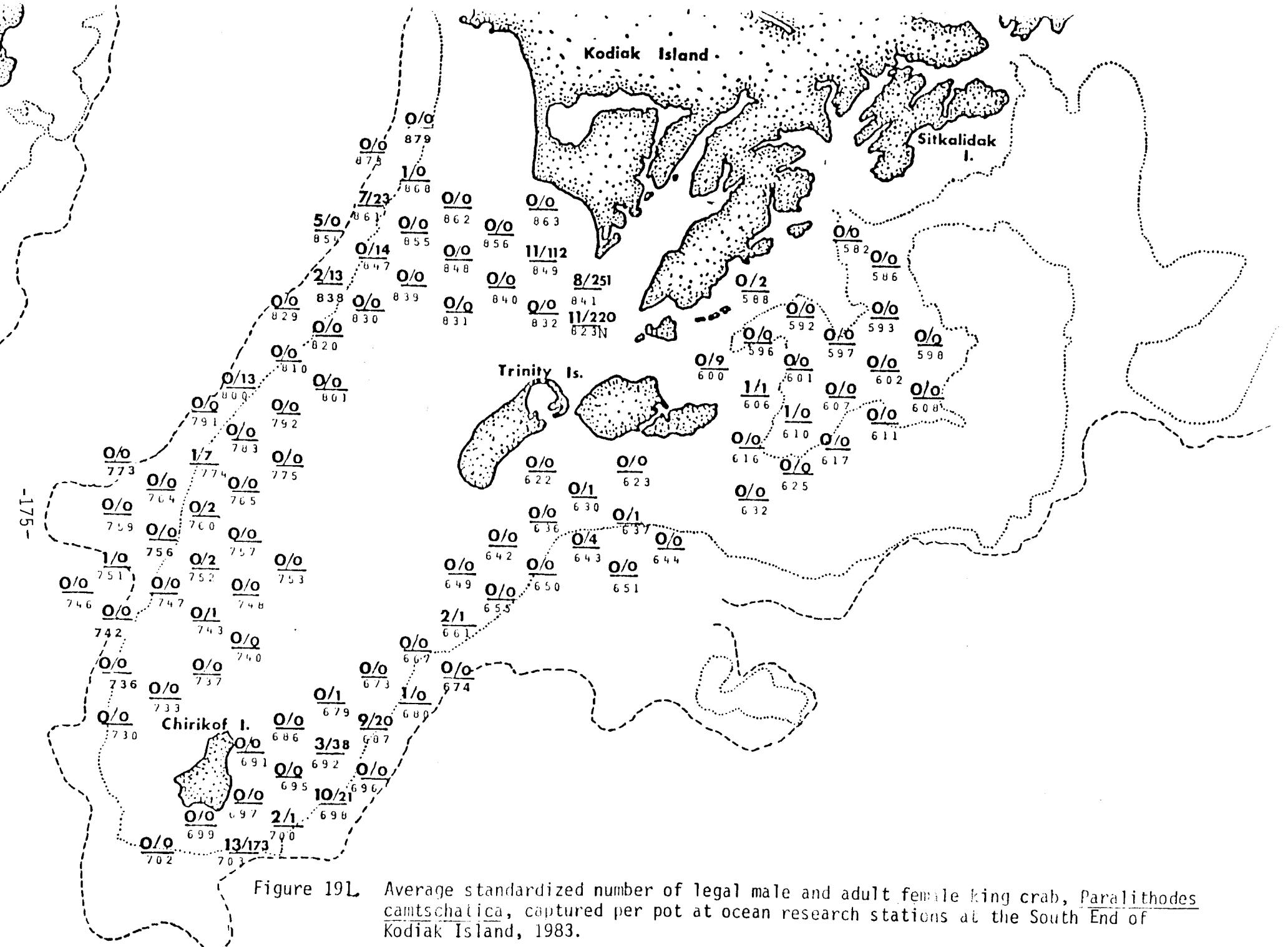


Figure 19k. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1982.

Presented as: Legal males/Adult females



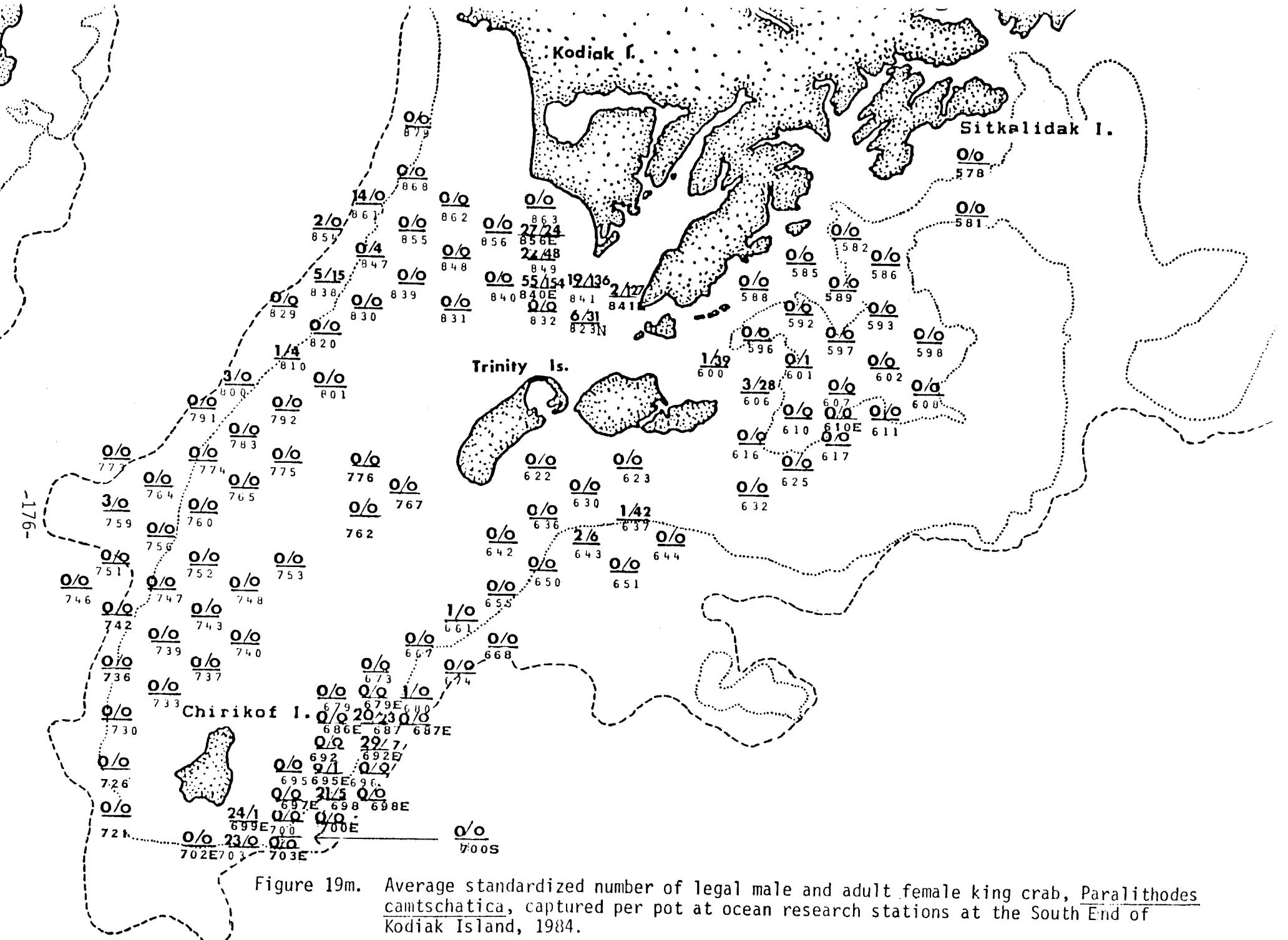


Figure 19m. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1984.

Presented as: Legal males/Adult females

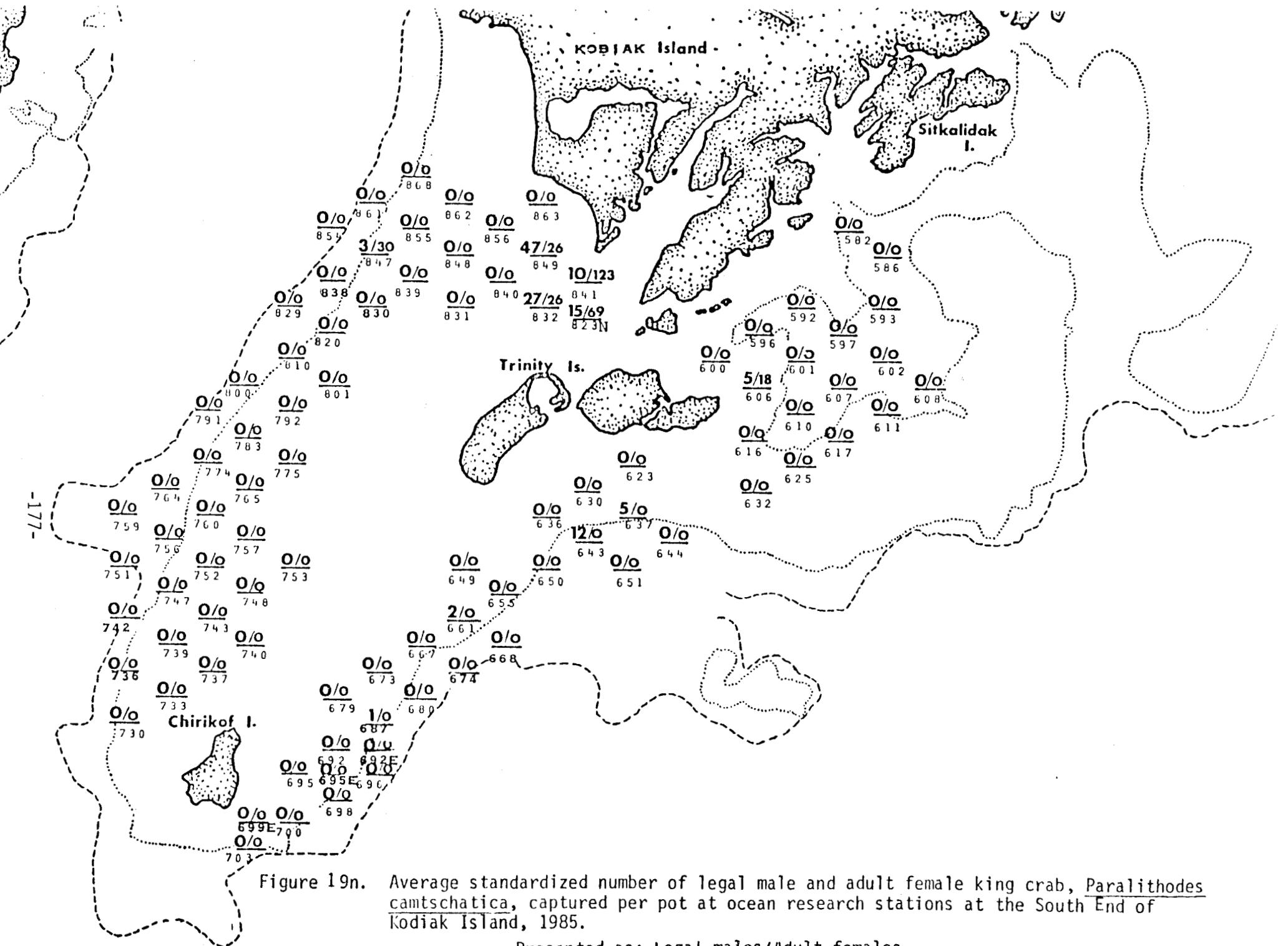


Figure 19n. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1985.

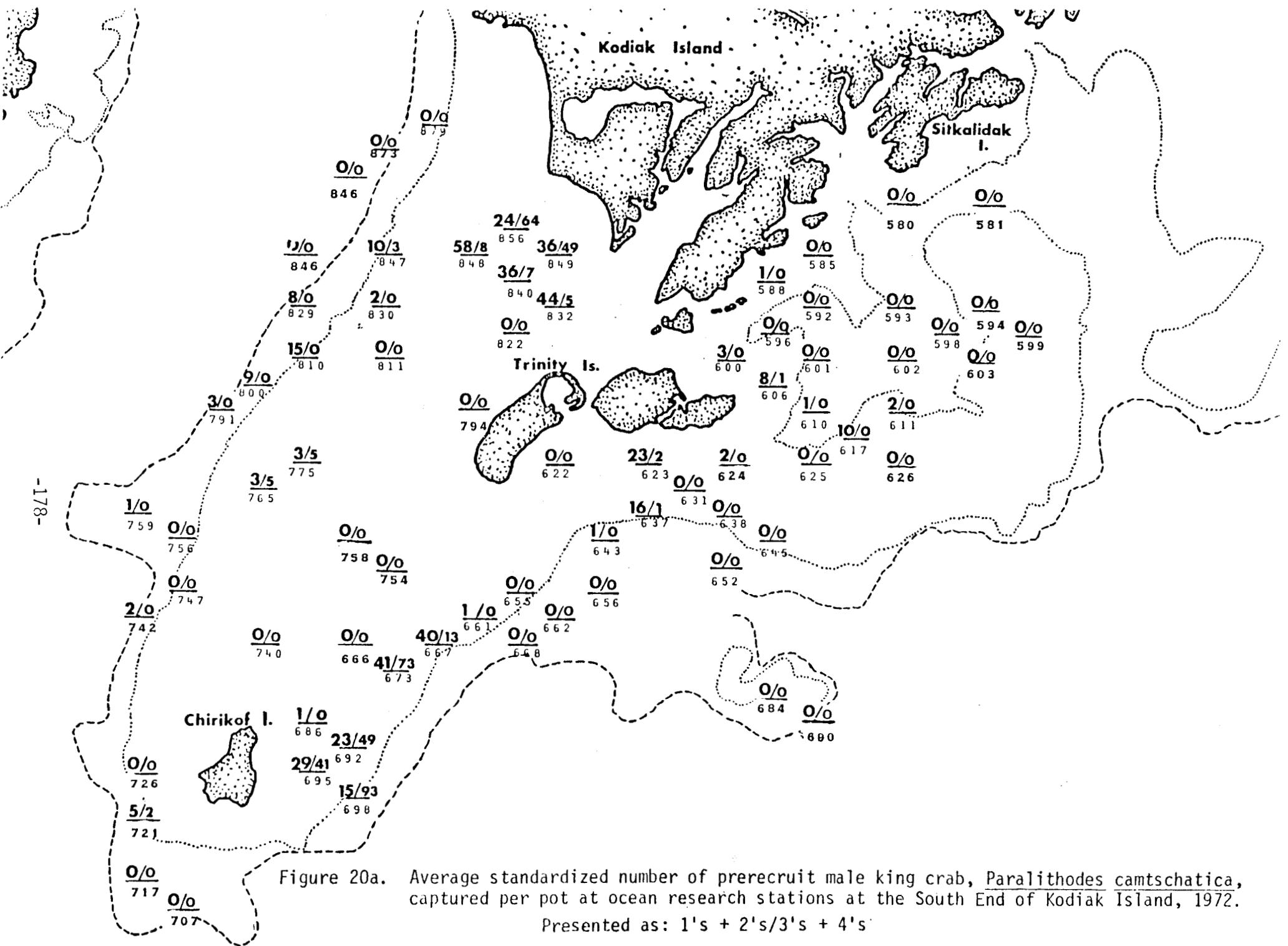
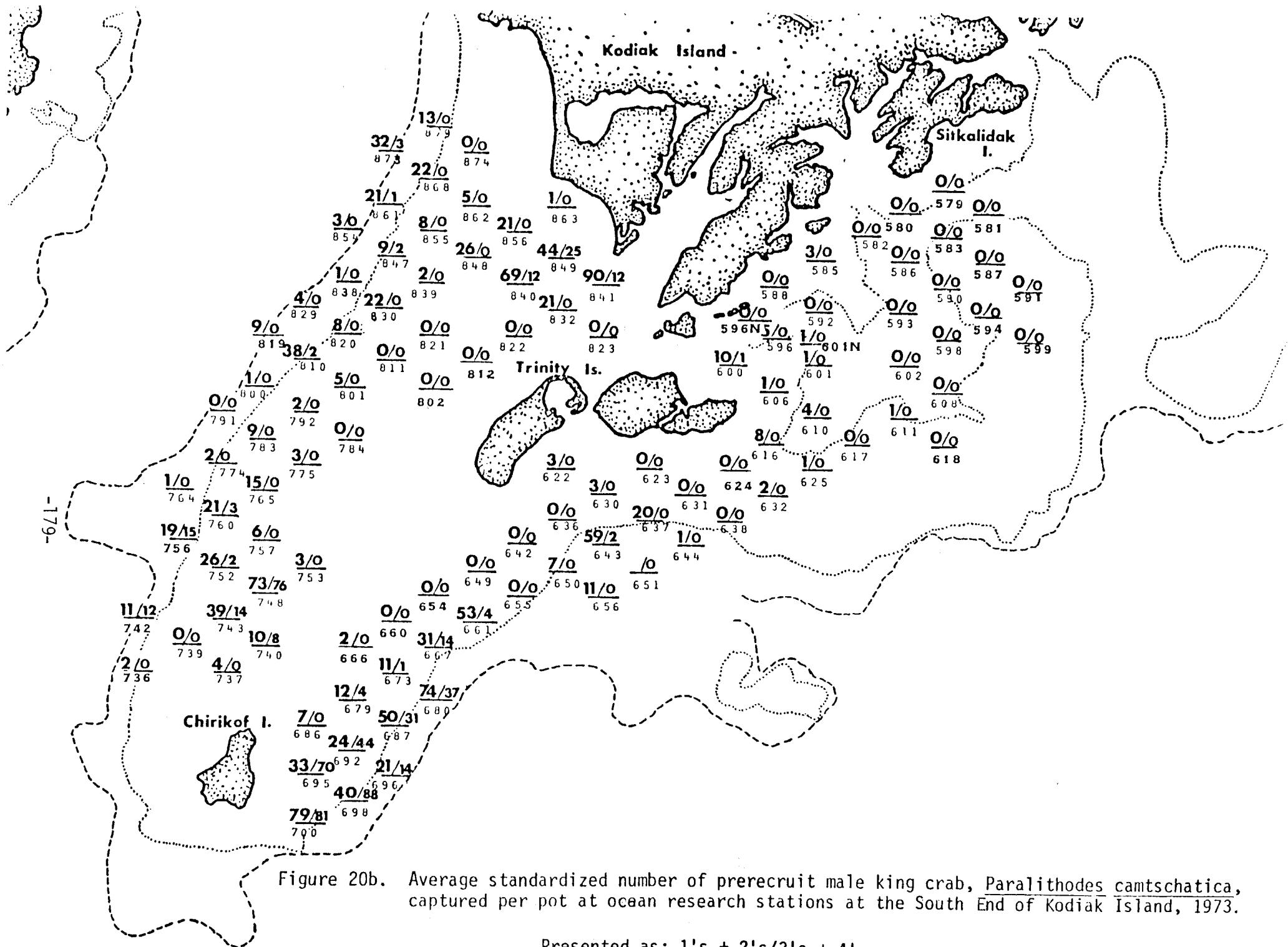
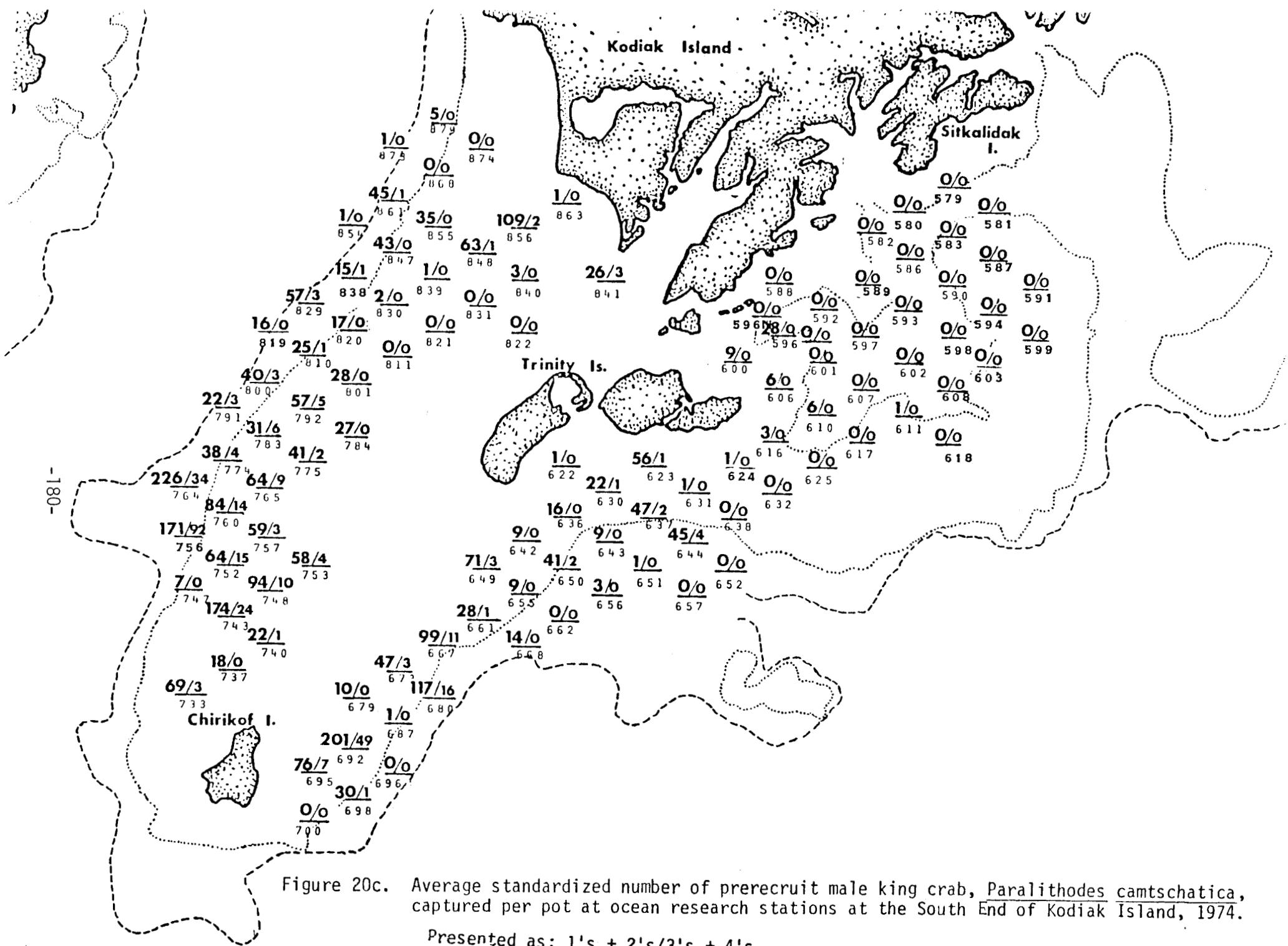


Figure 20a. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1972.  
Presented as: 1's + 2's/3's + 4's





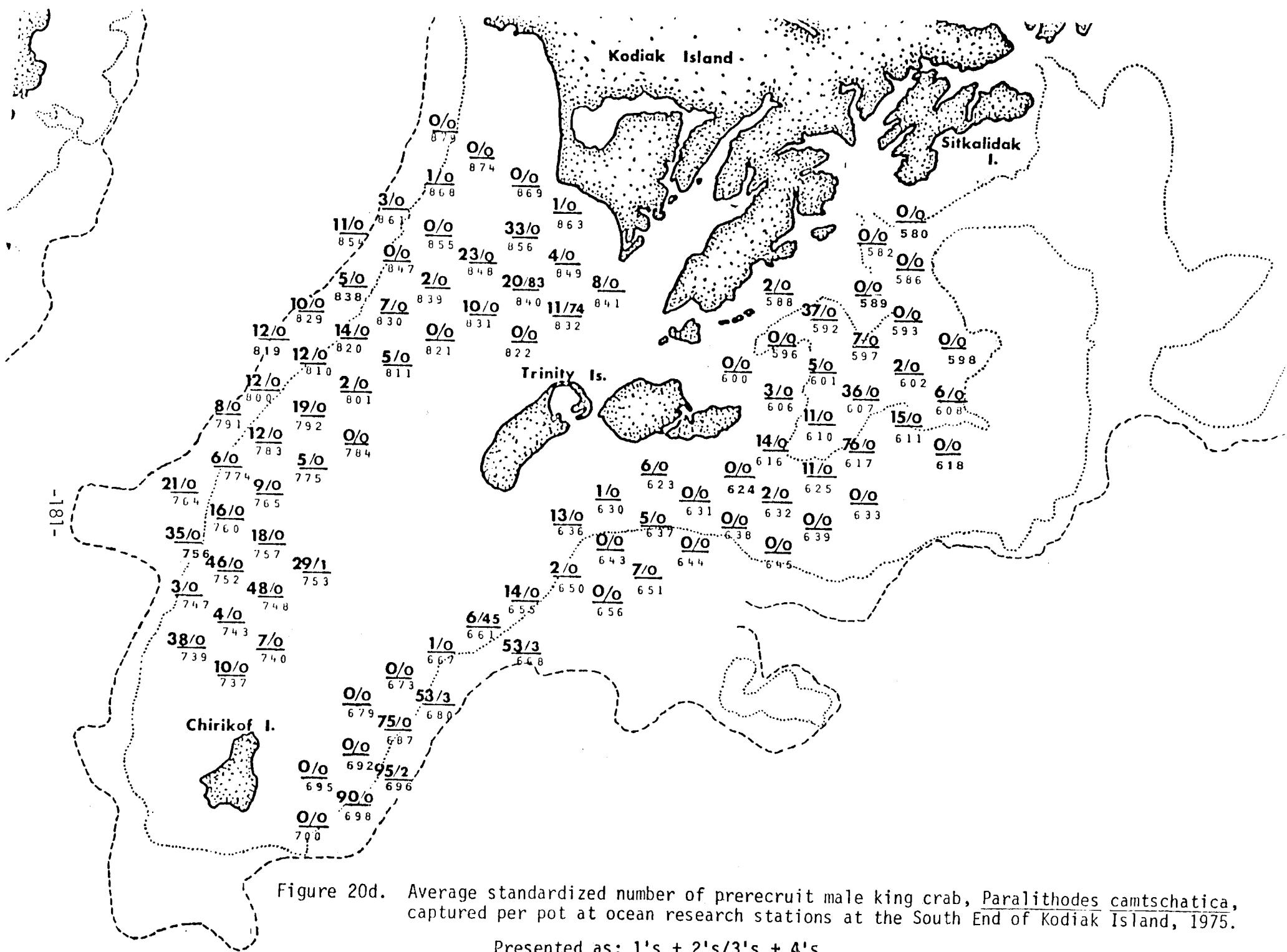


Figure 20d. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at ocean research stations at the South End of Kodiak Island, 1975.

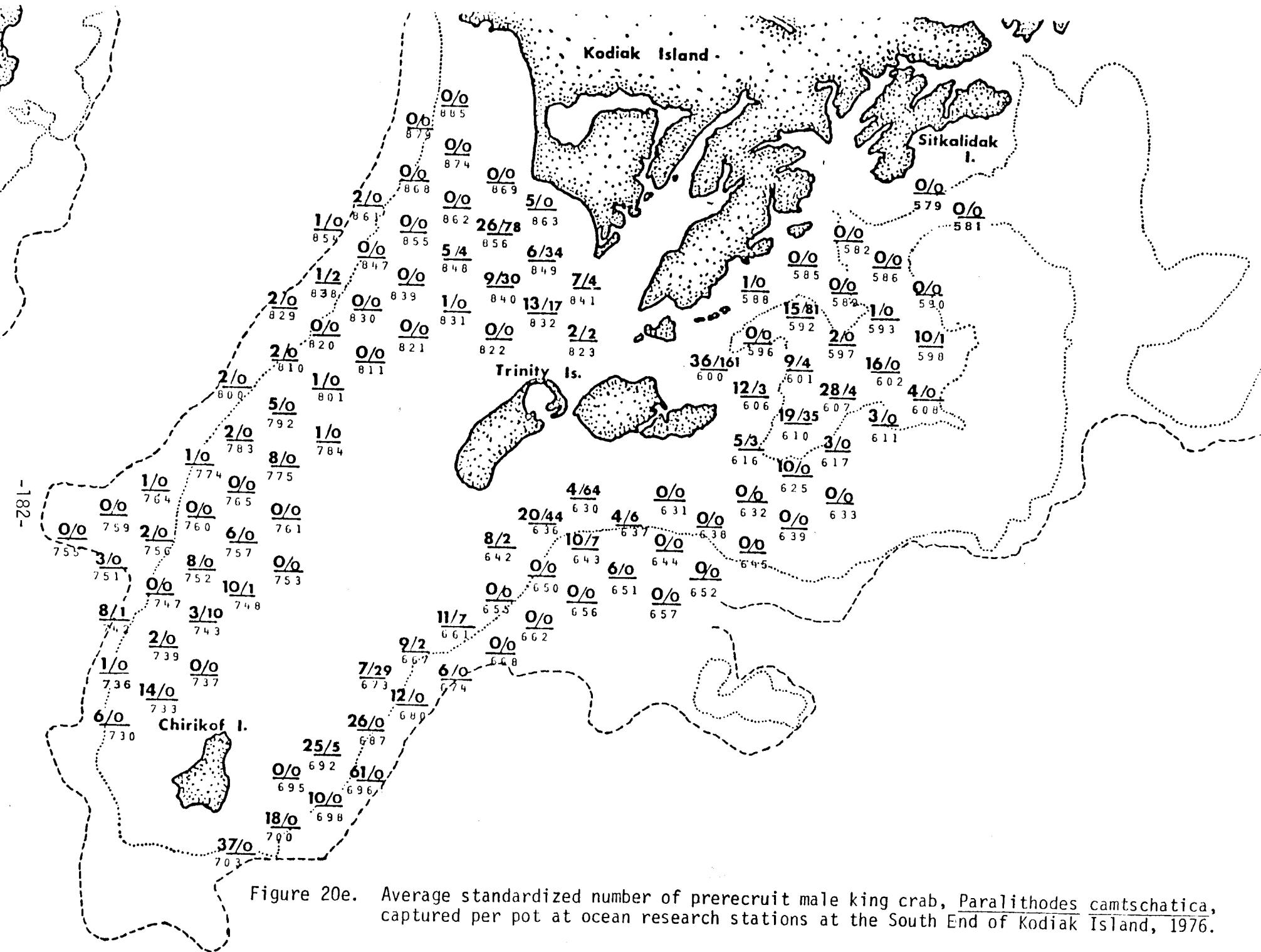


Figure 20e. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at ocean research stations at the South End of Kodiak Island, 1976.

Presented as: 1's + 2's/3's + 4's

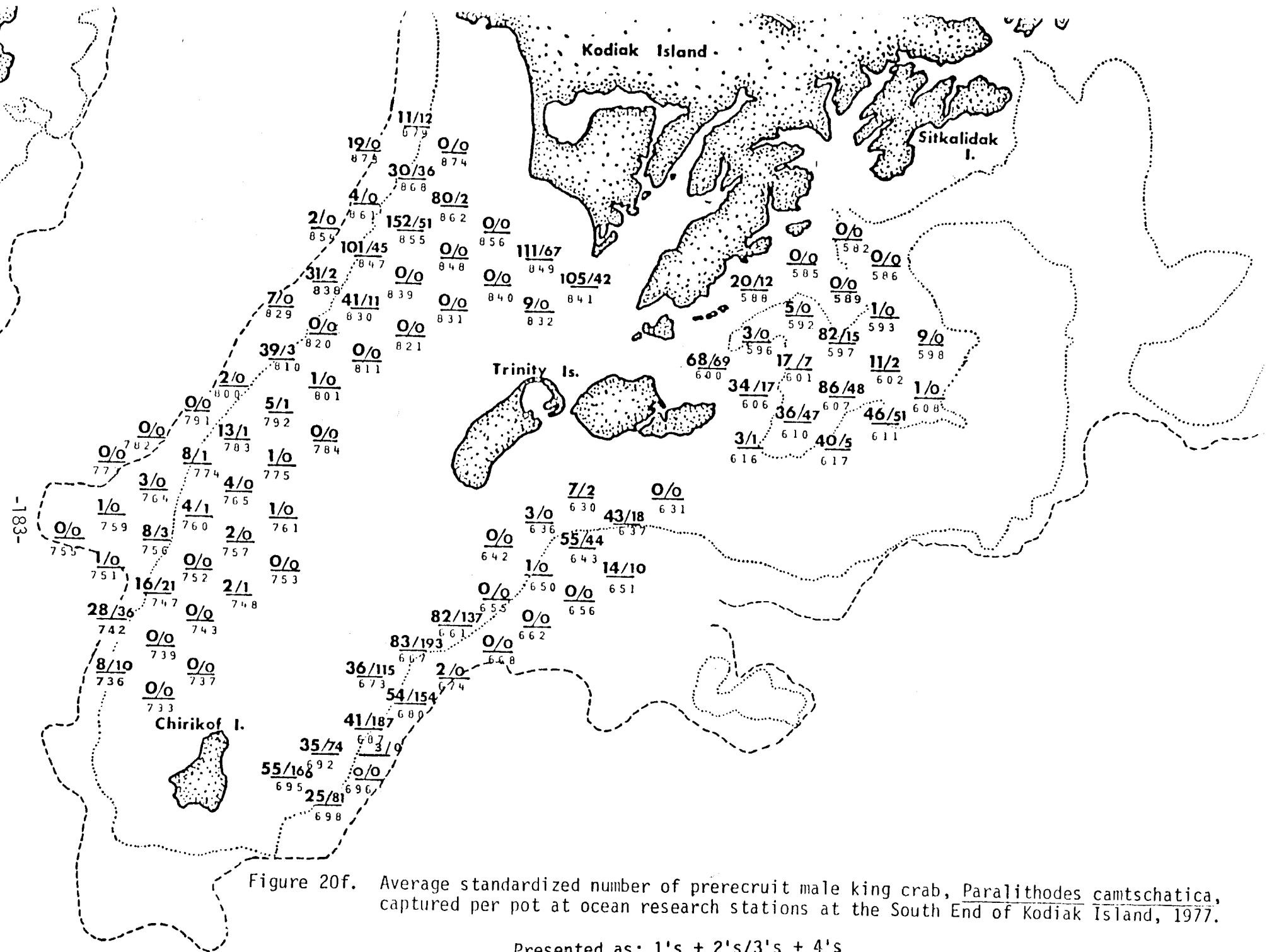


Figure 20f. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1977.

Presented as: 1's + 2's/3's + 4's

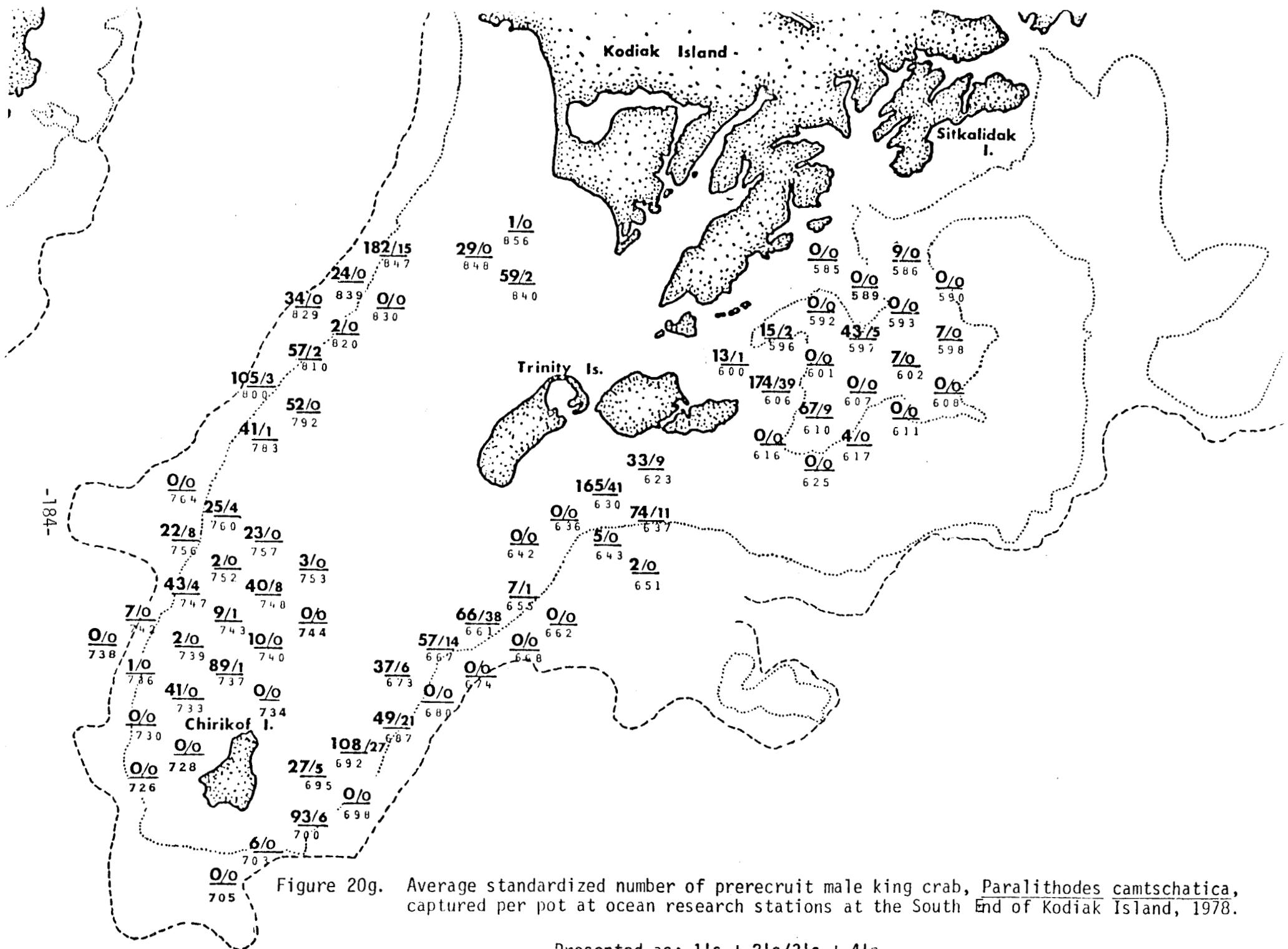


Figure 20g. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1978.

Presented as: 1's + 2's/3's + 4's

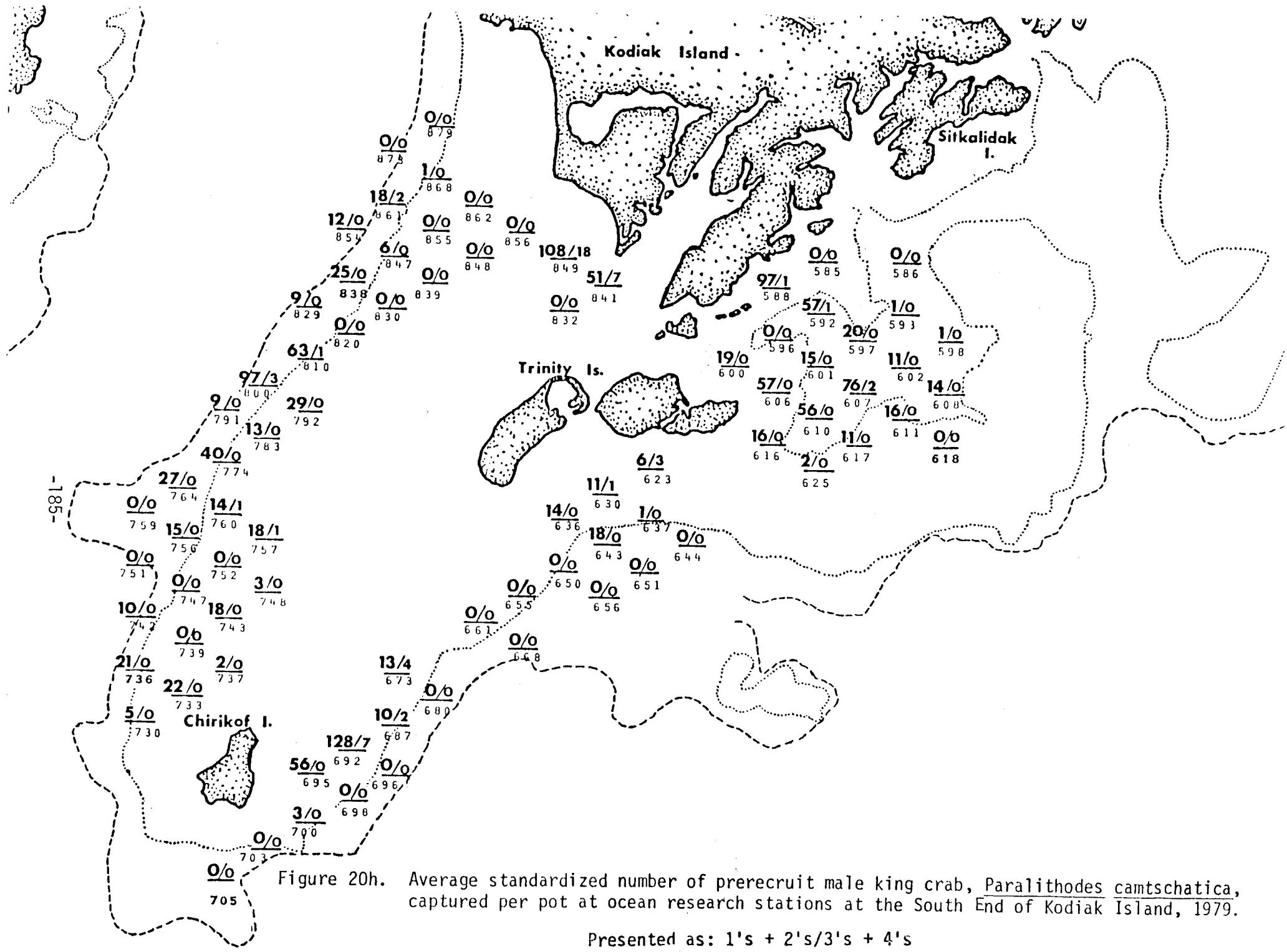
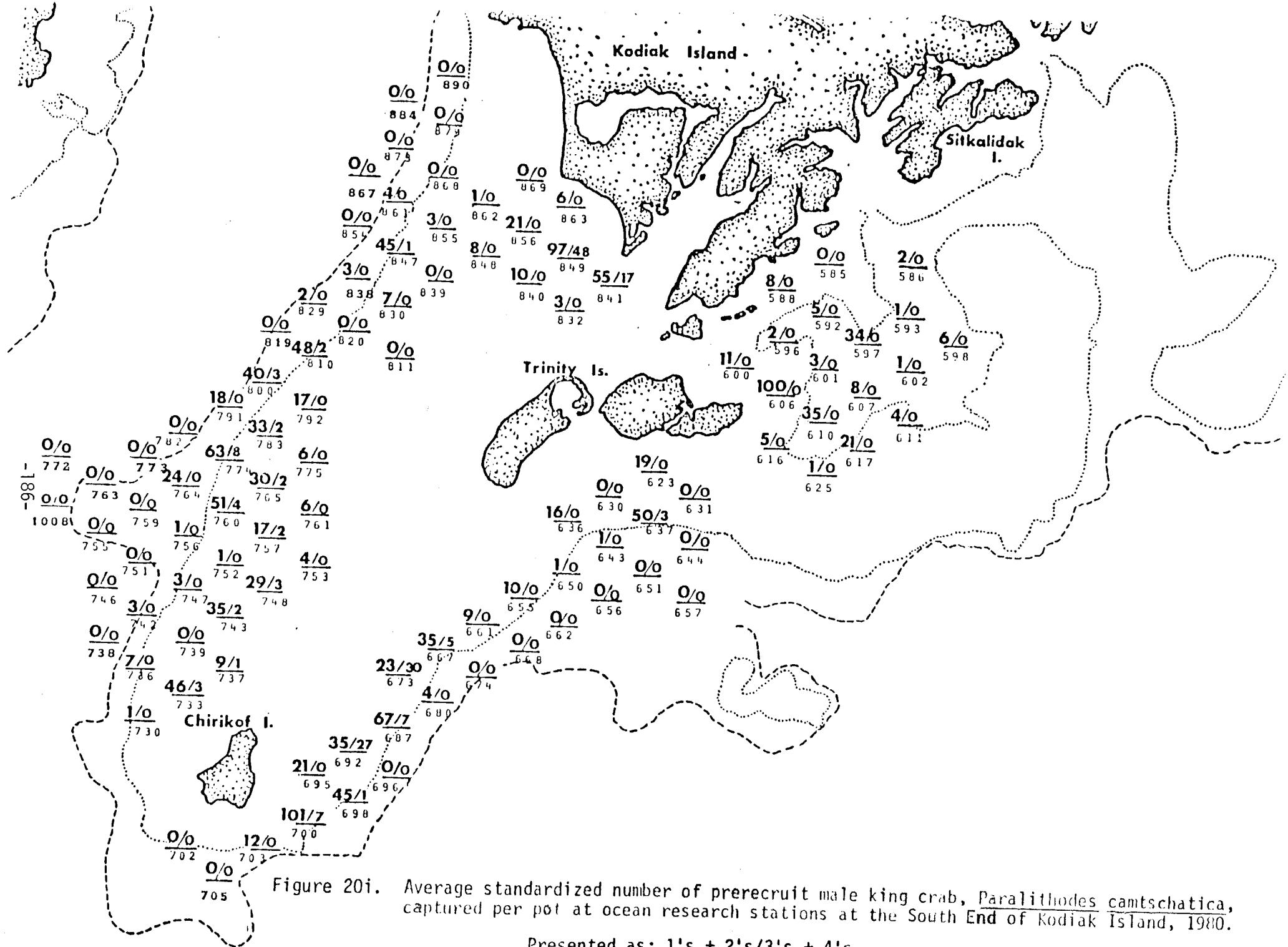
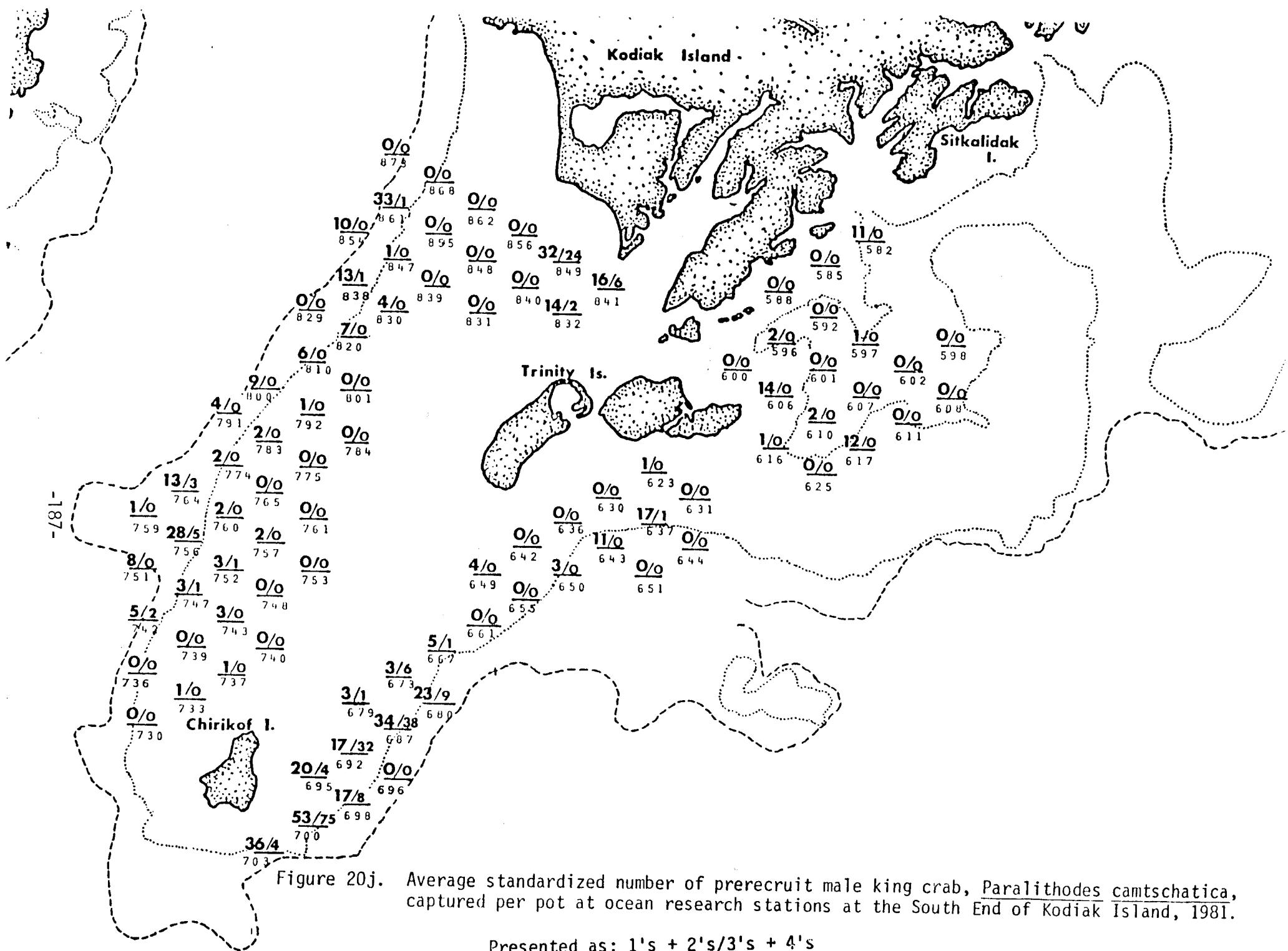


Figure 20h. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at ocean research stations at the South End of Kodiak Island, 1979.

Presented as: 1's + 2's/3's + 4's





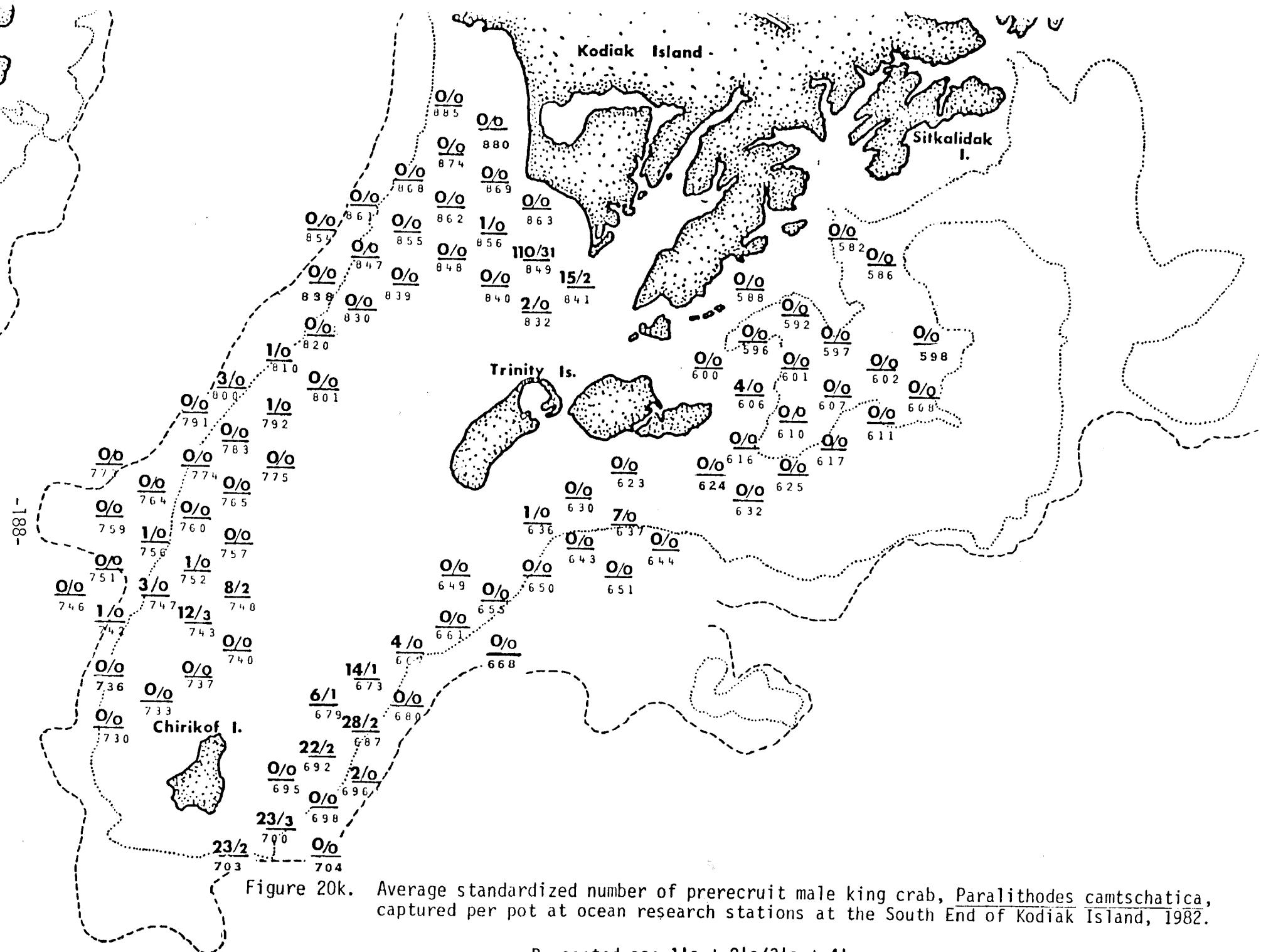


Figure 20k. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1982.

Presented as: 1's + 2's/3's + 4's

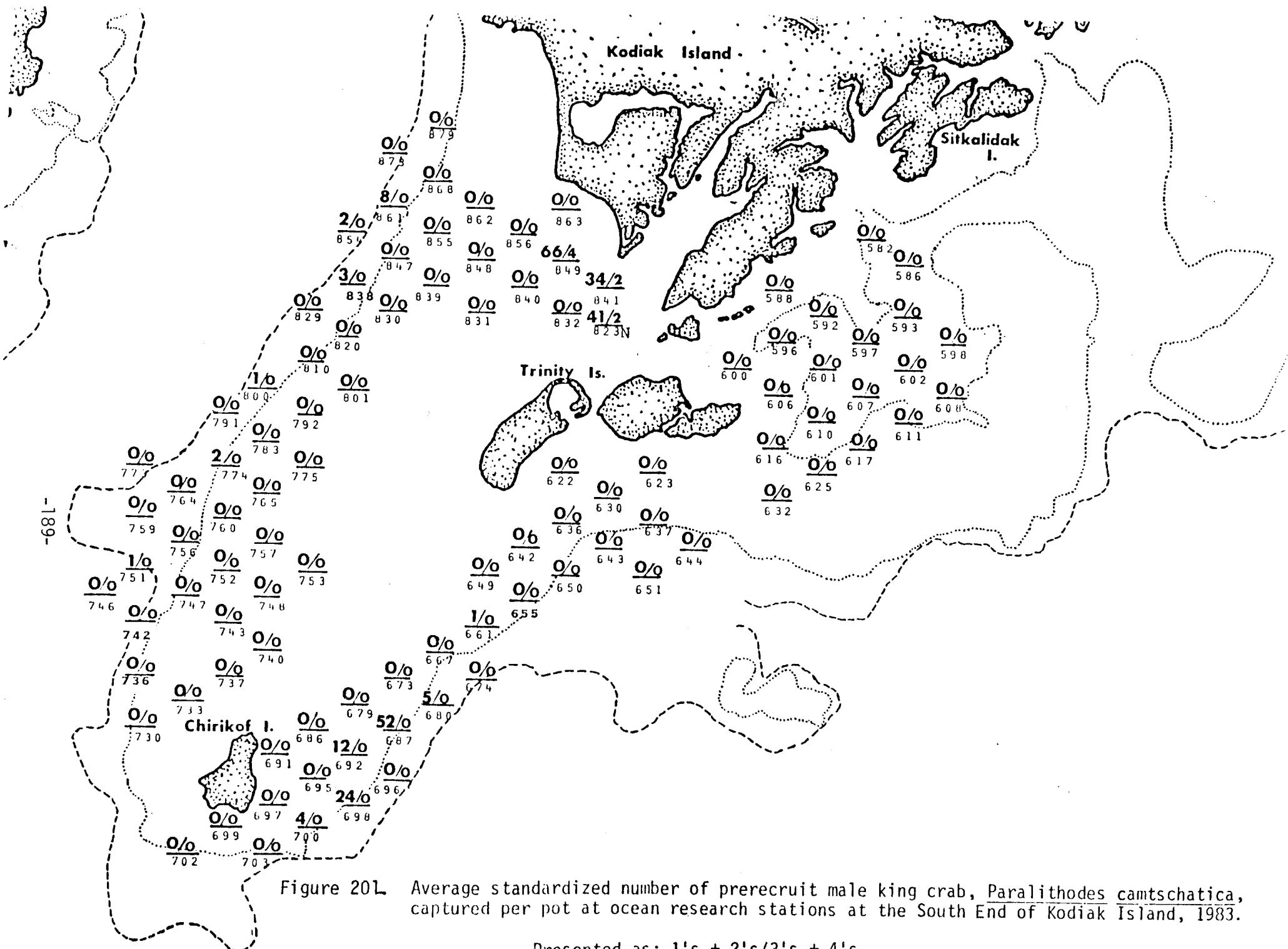


Figure 20L Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1983.

Presented as: 1's + 2's/3's + 4's

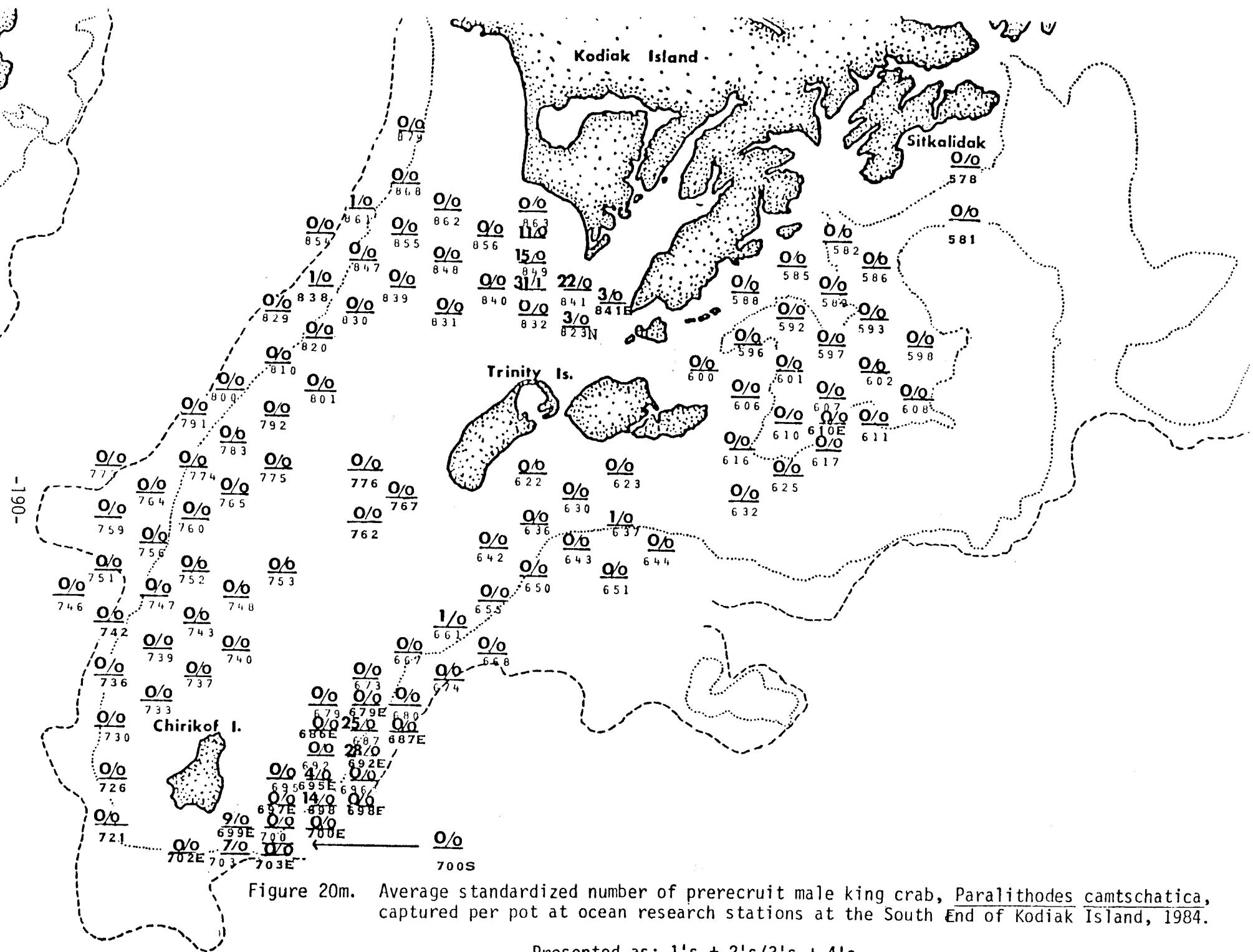


Figure 20m. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1984.

Presented as: 1's + 2's/3's + 4's

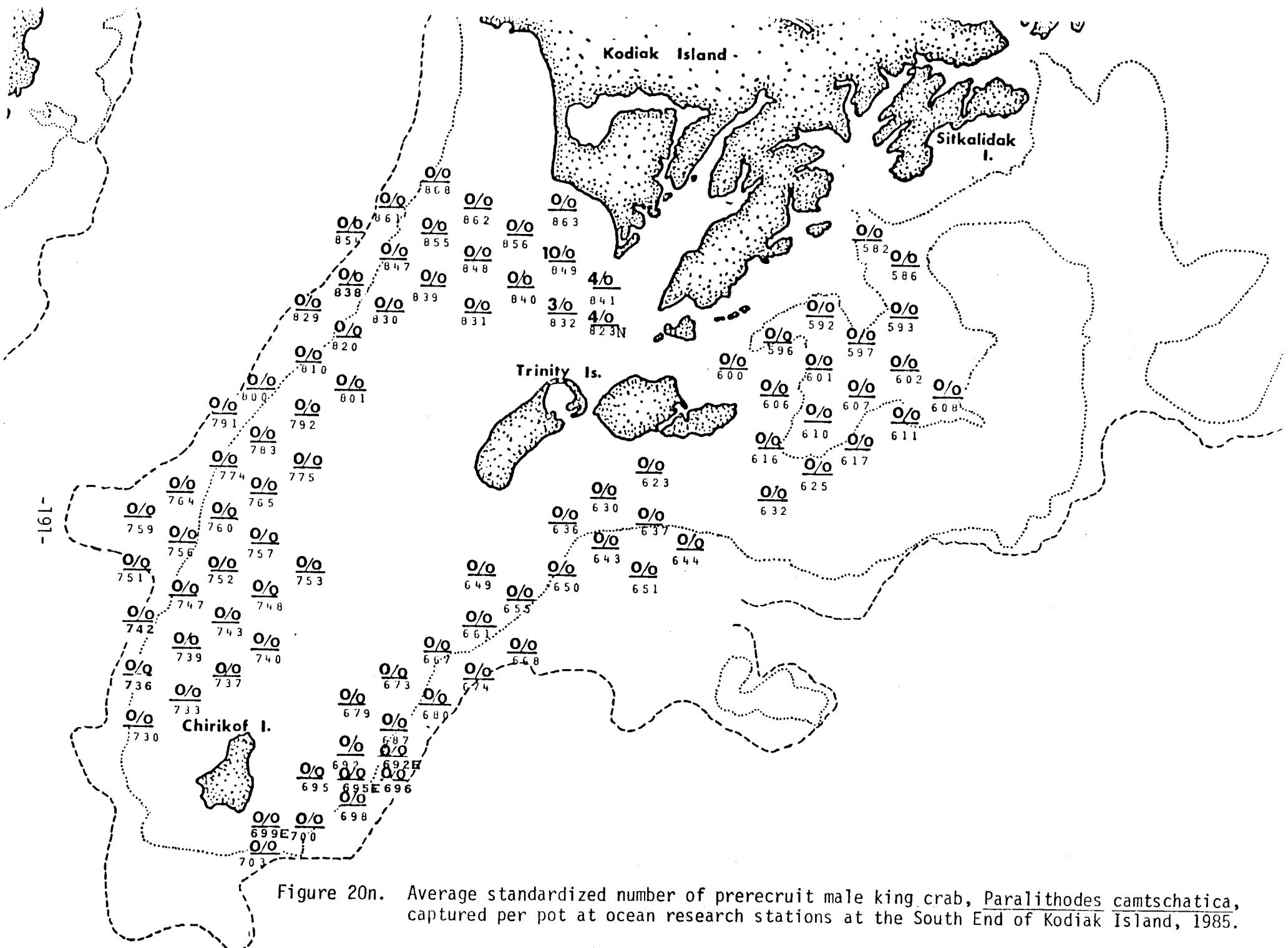


Figure 20n. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1985.

Presented as: 1's + 2's/3's + 4's

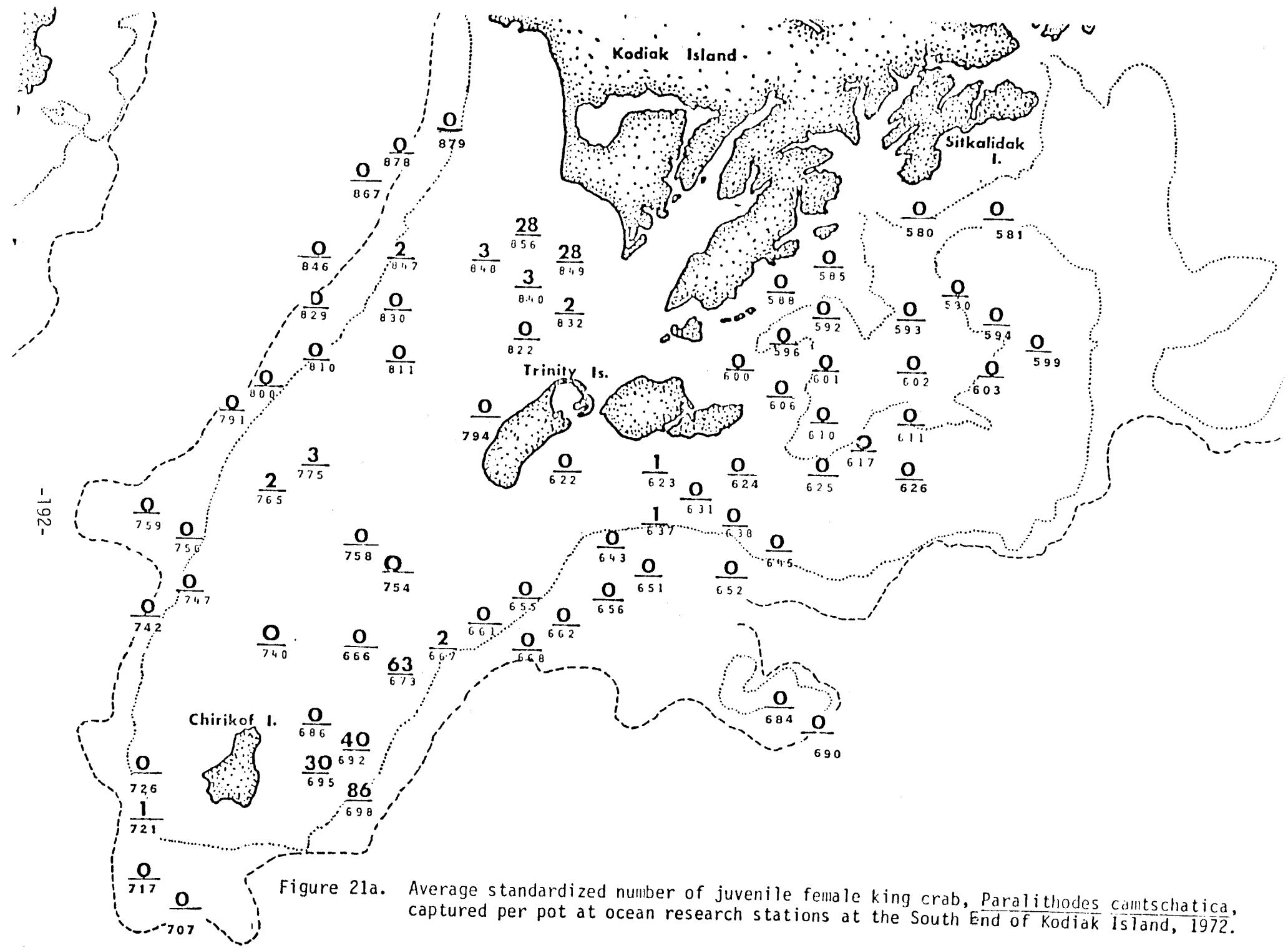
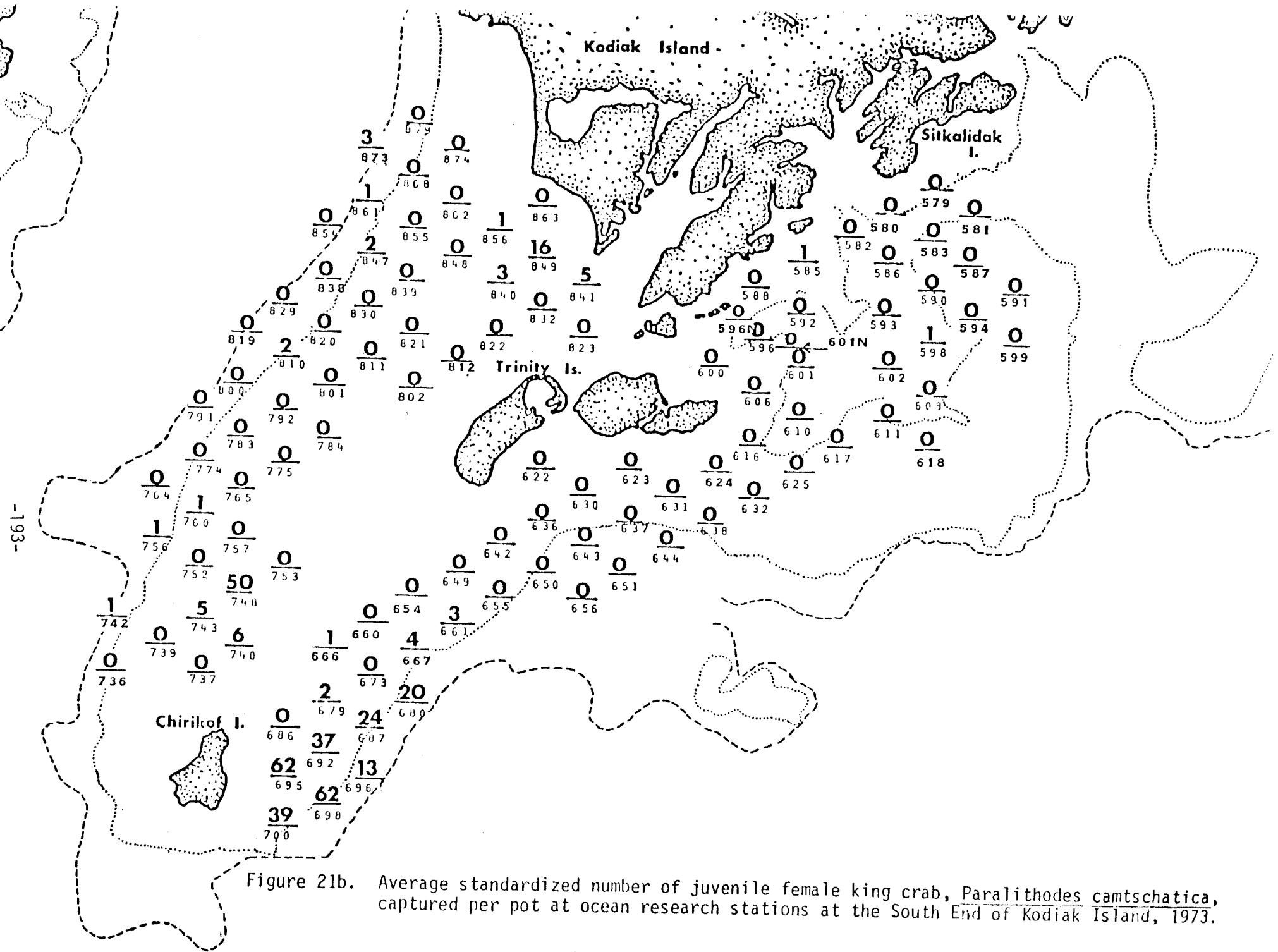


Figure 21a. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1972.



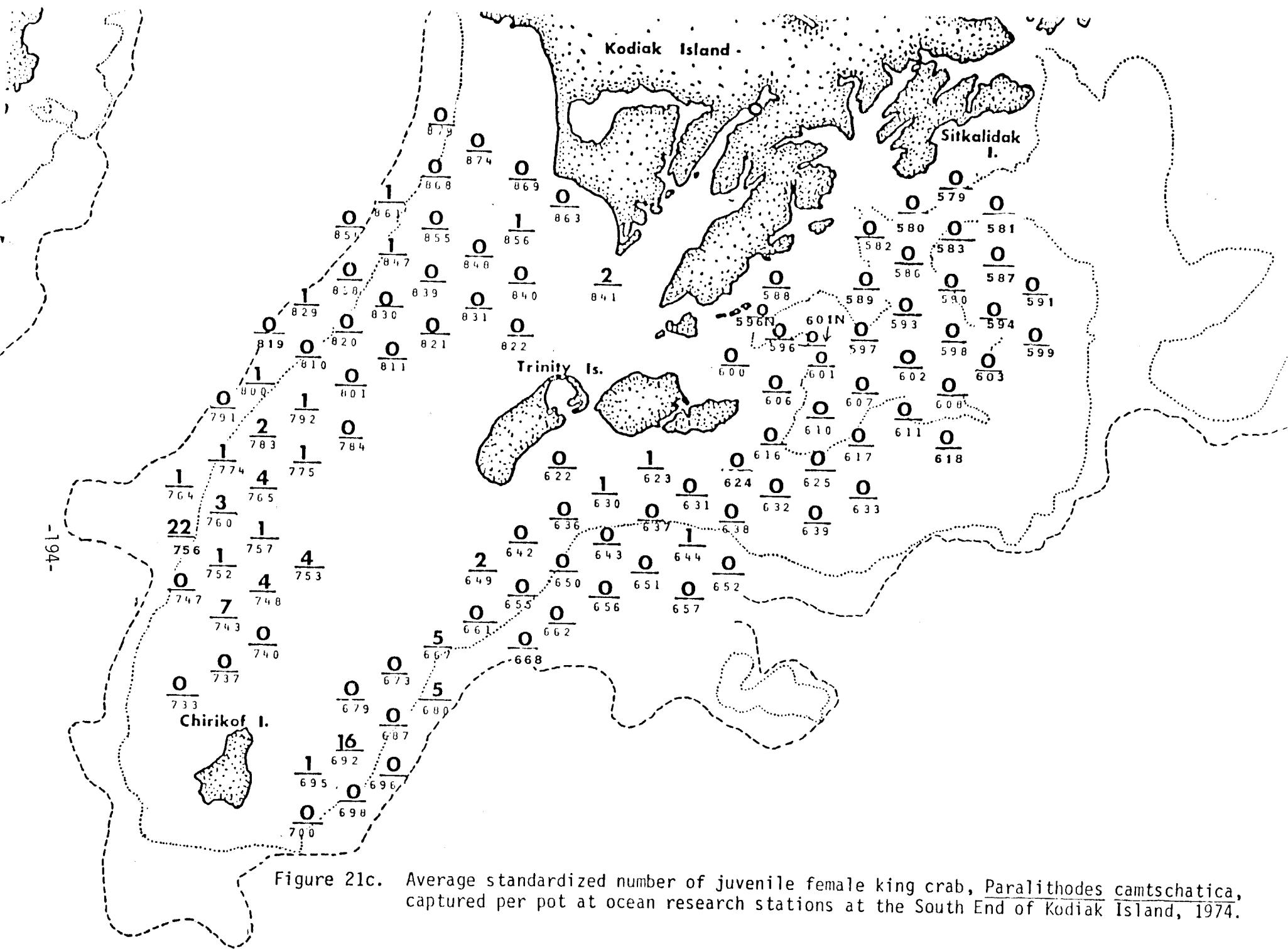


Figure 21c. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1974.

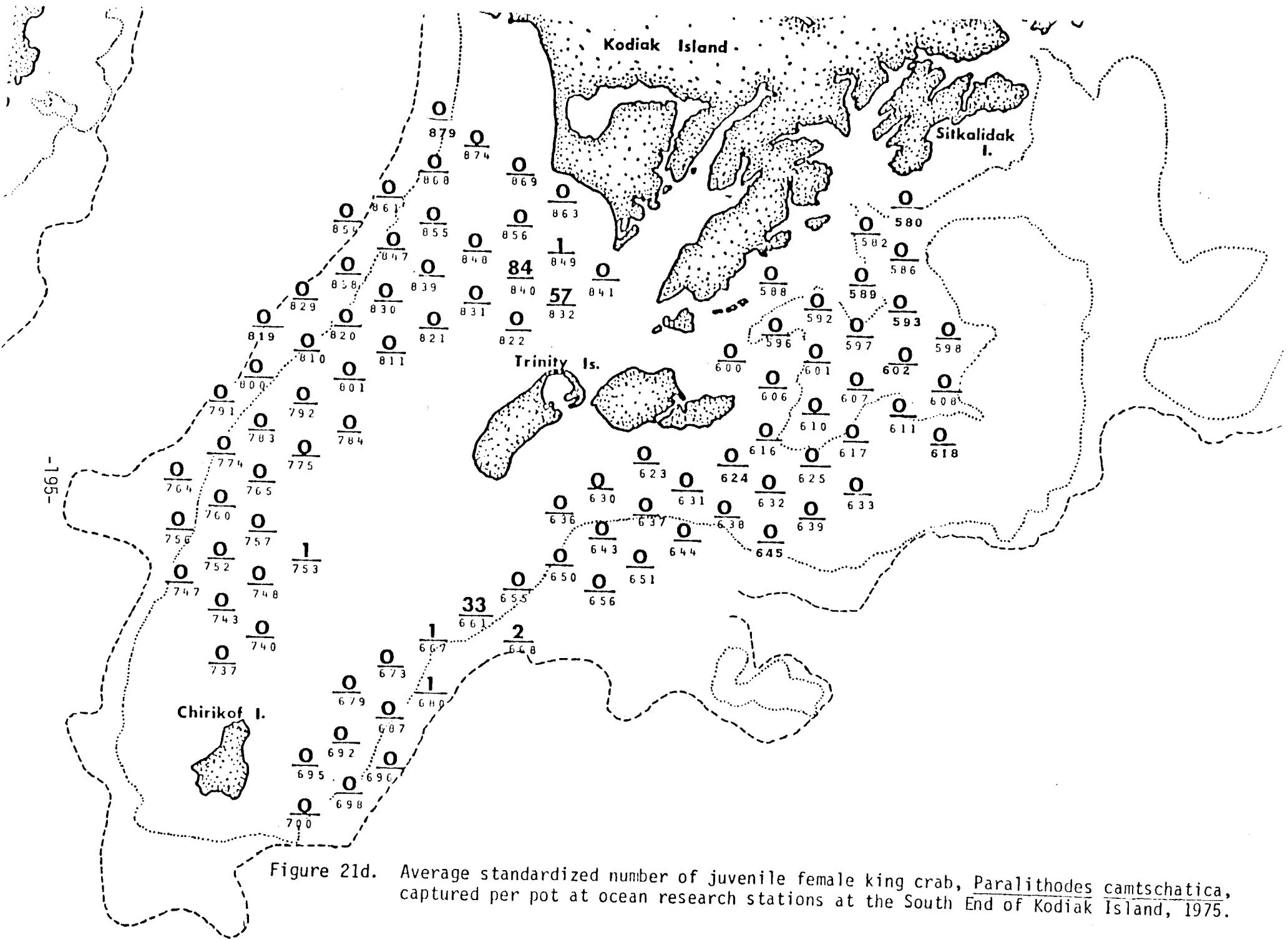


Figure 21d. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1975.

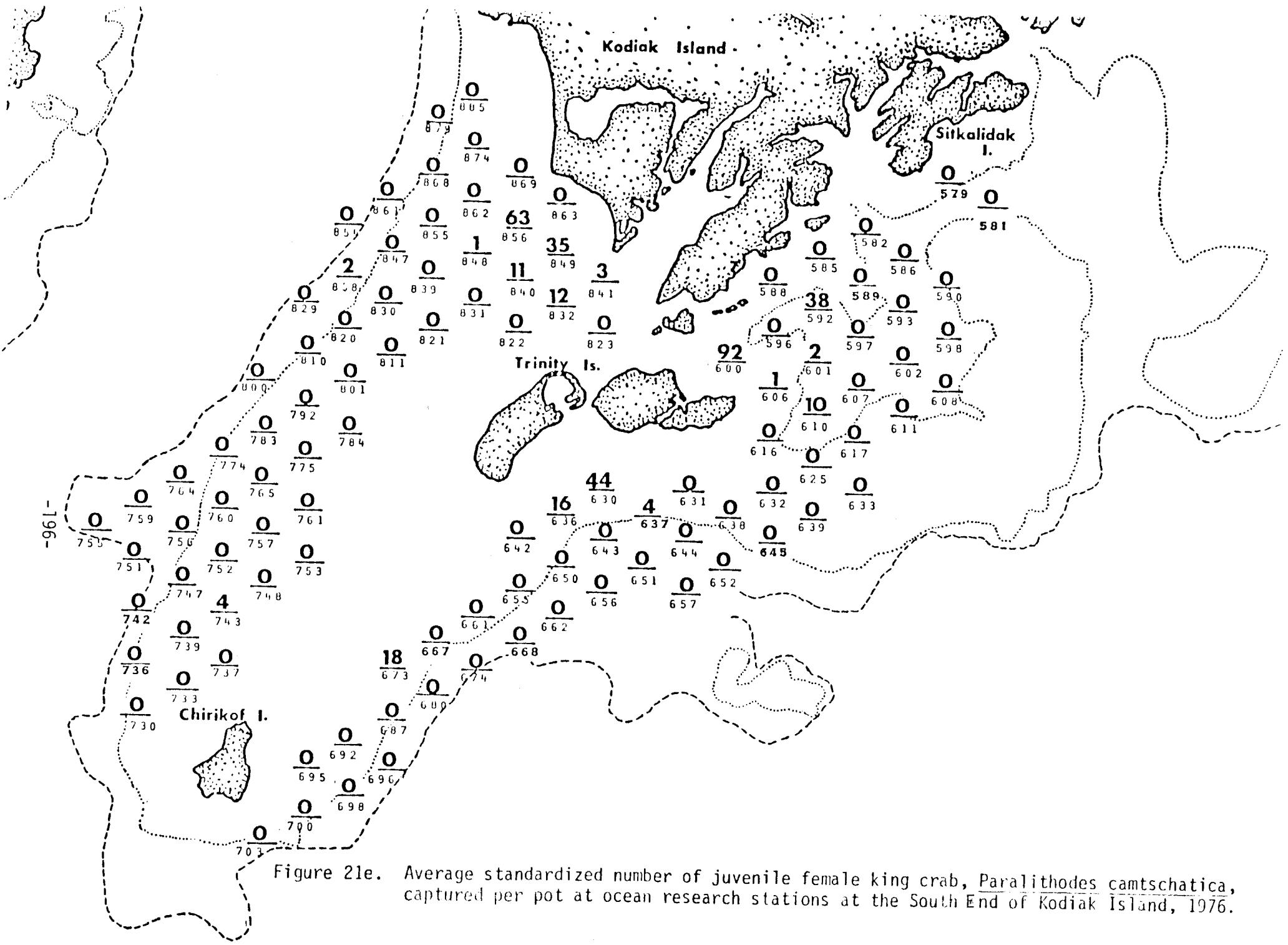


Figure 21e. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1976.

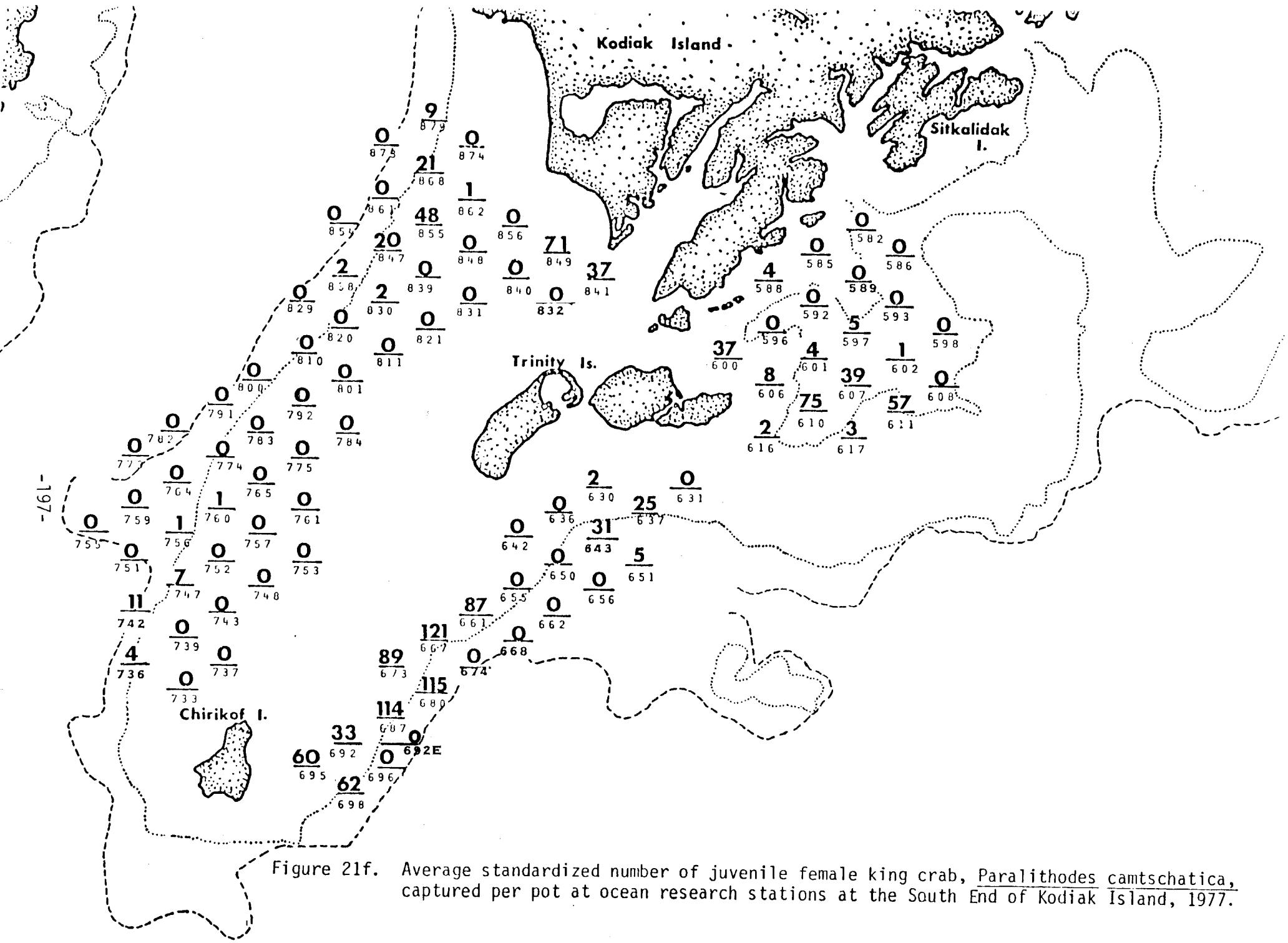


Figure 21f. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at ocean research stations at the South End of Kodiak Island, 1977.

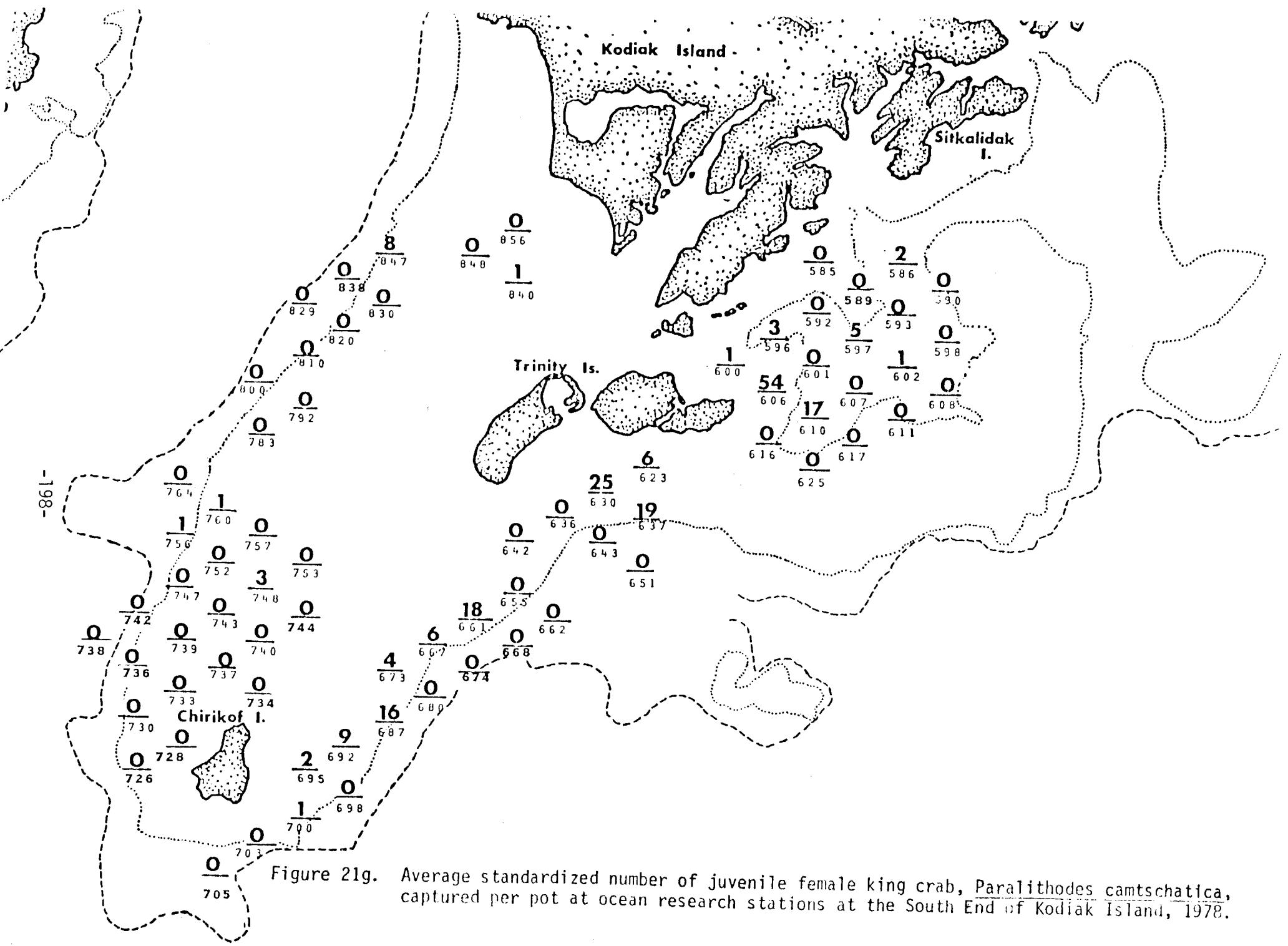


Figure 21g. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1978.

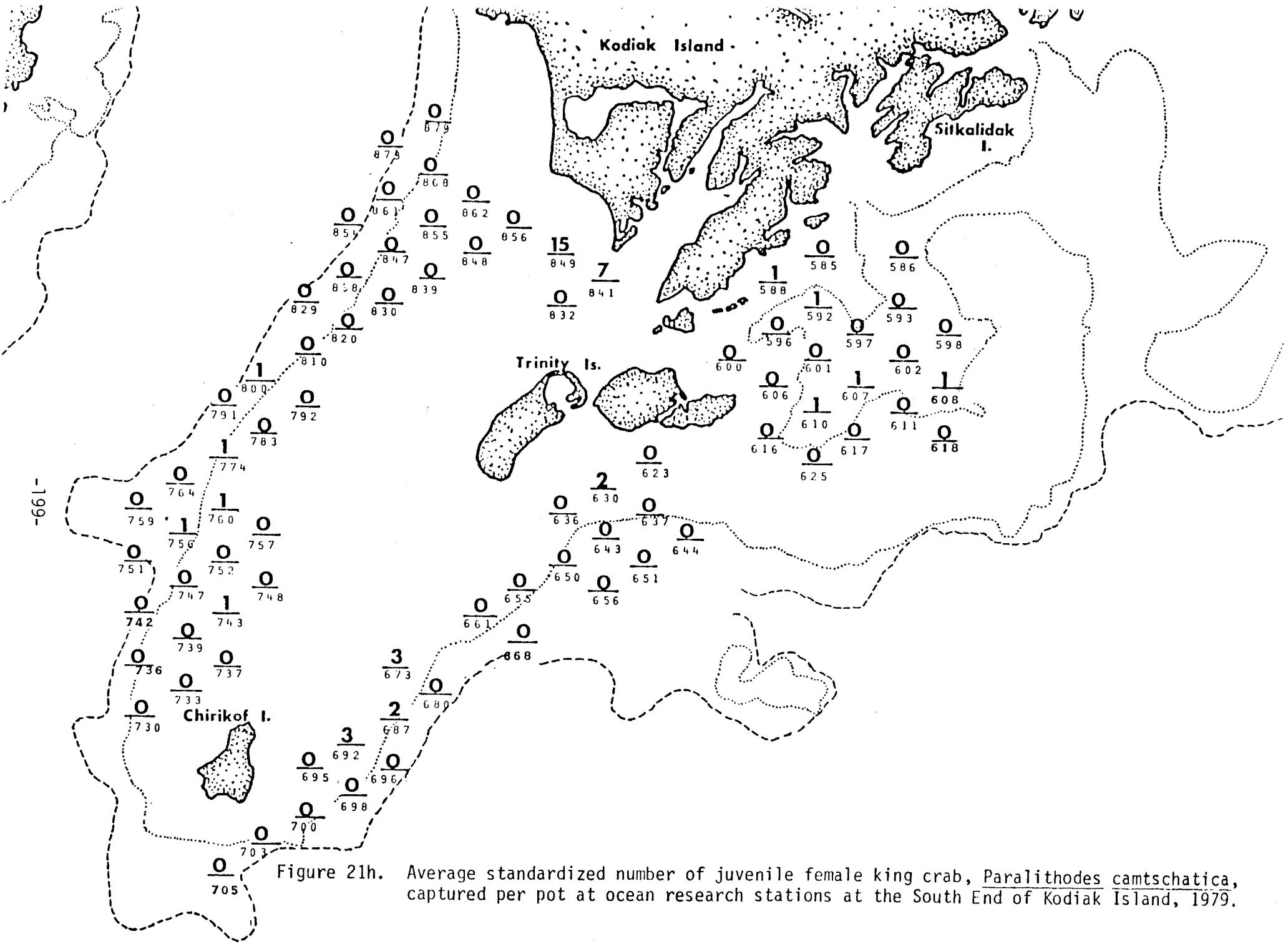


Figure 21h. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1979.

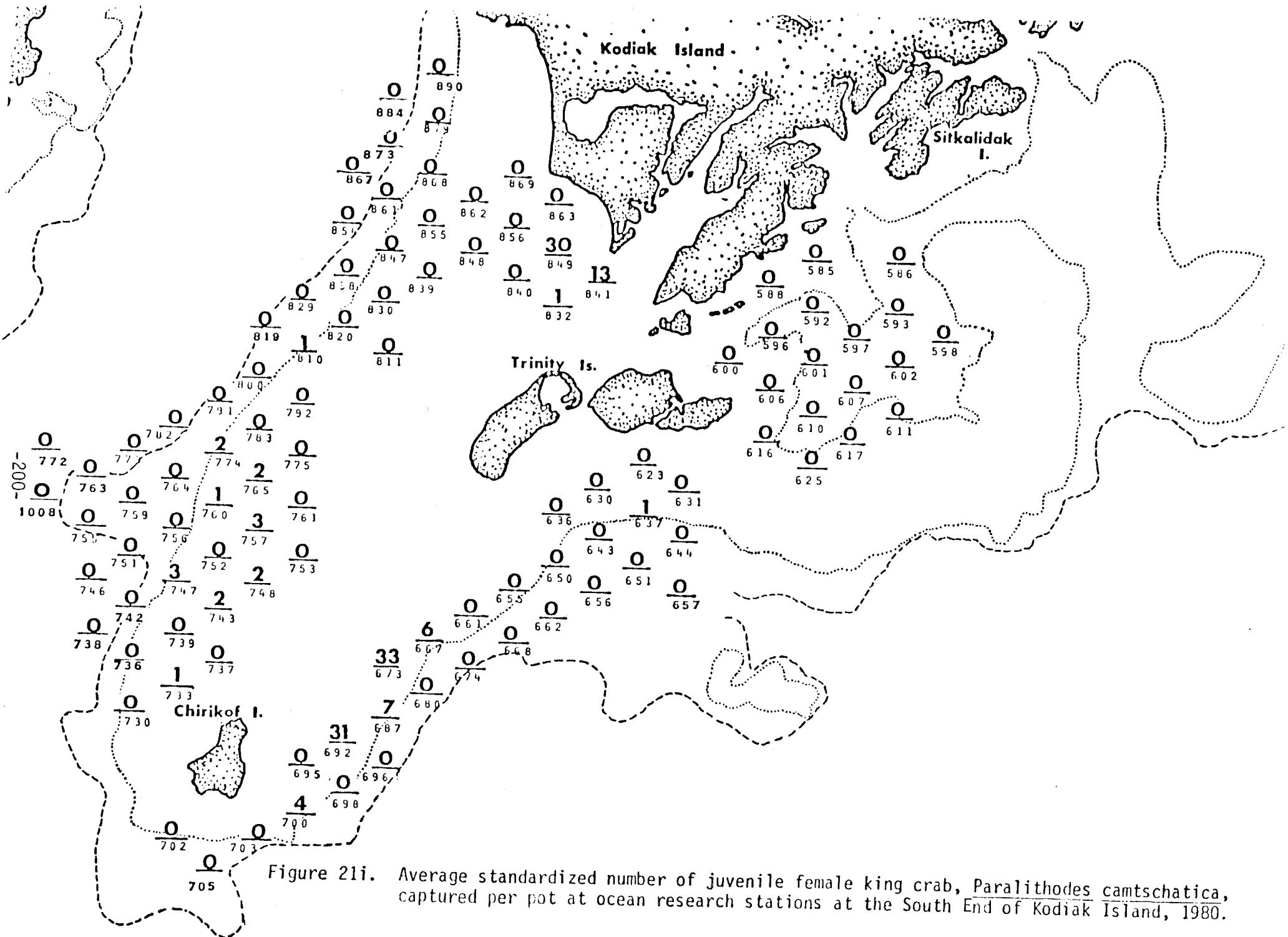


Figure 21i. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1980.

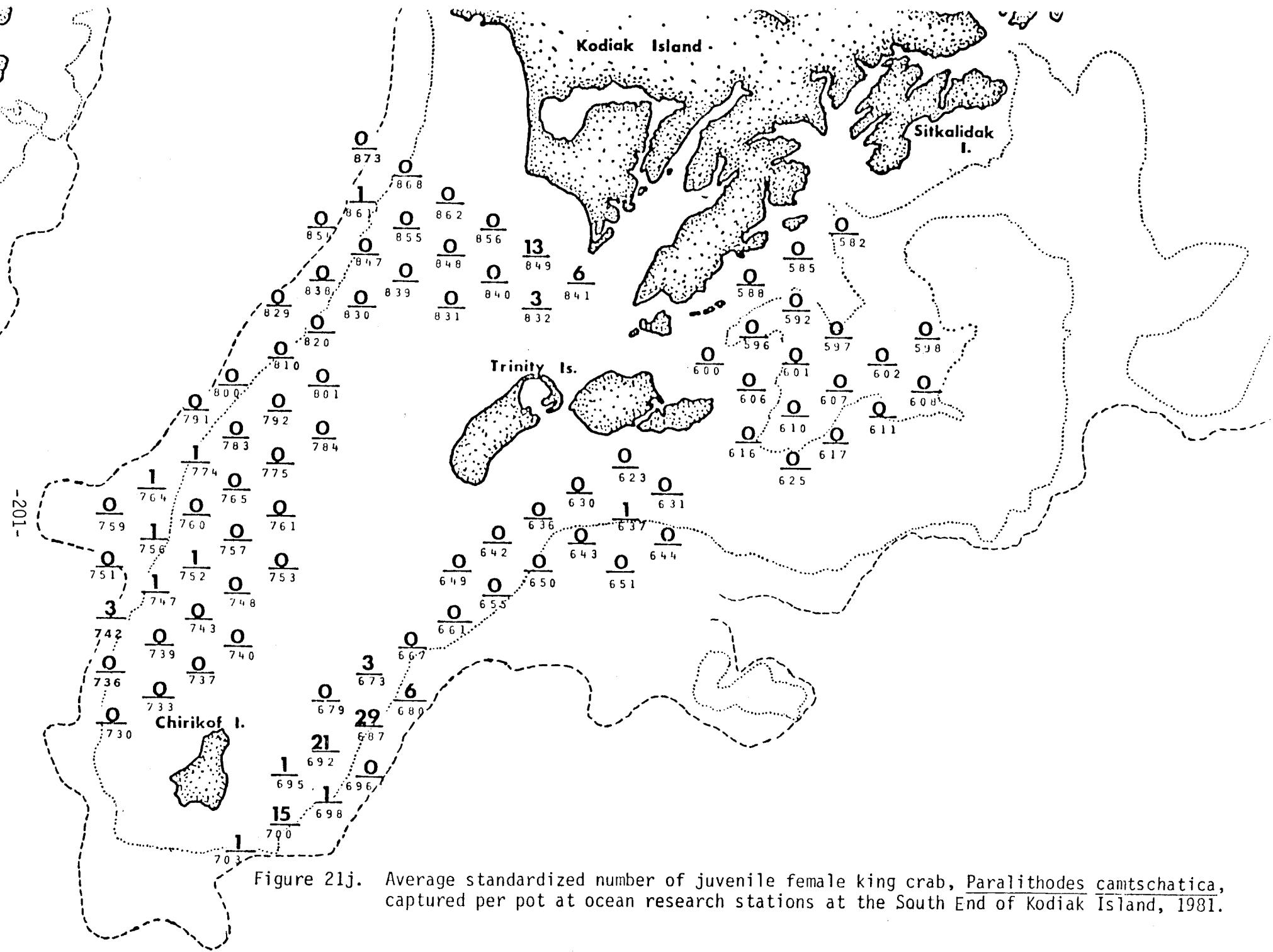


Figure 21j. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1981.

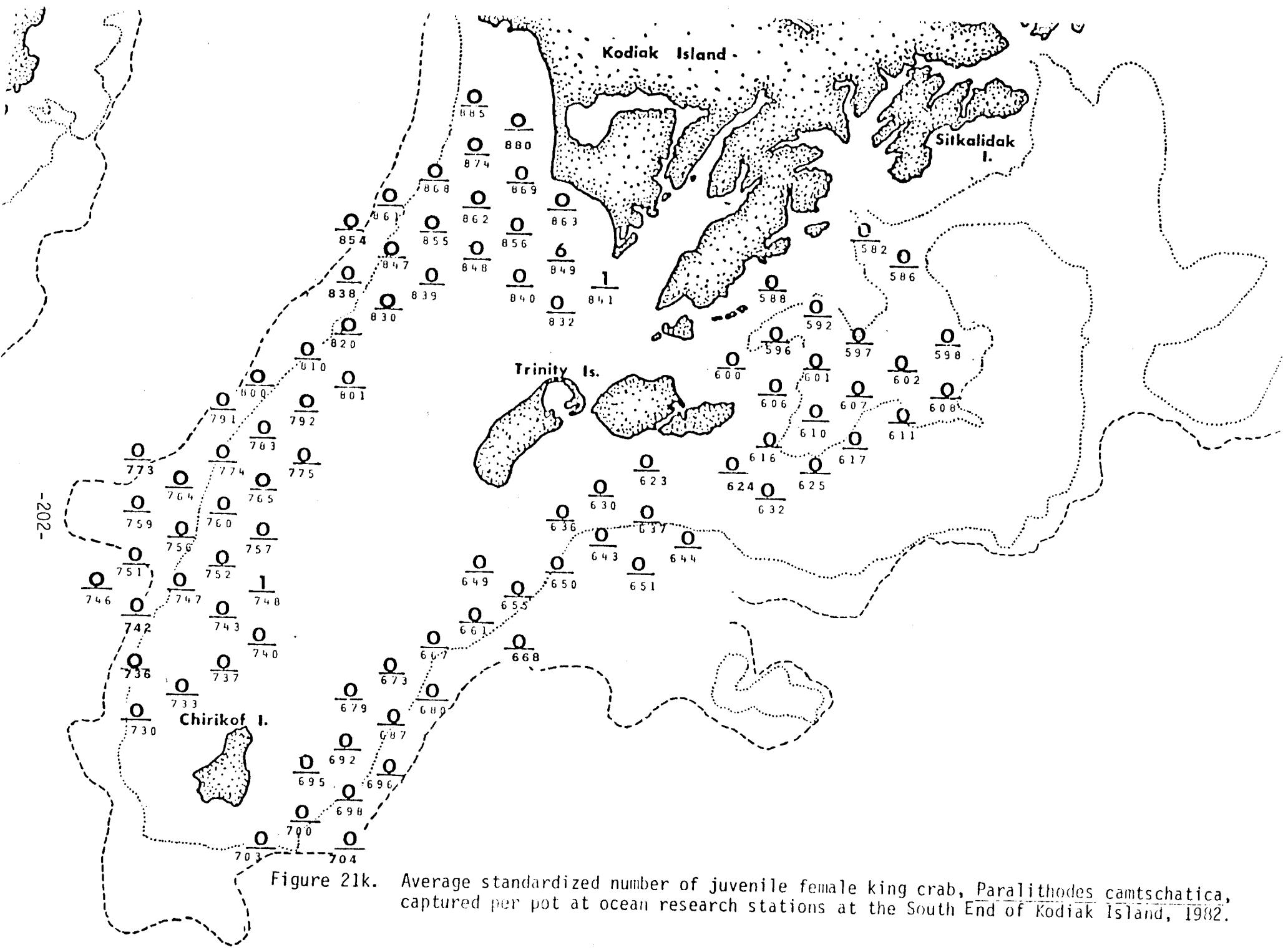


Figure 21k. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1982.

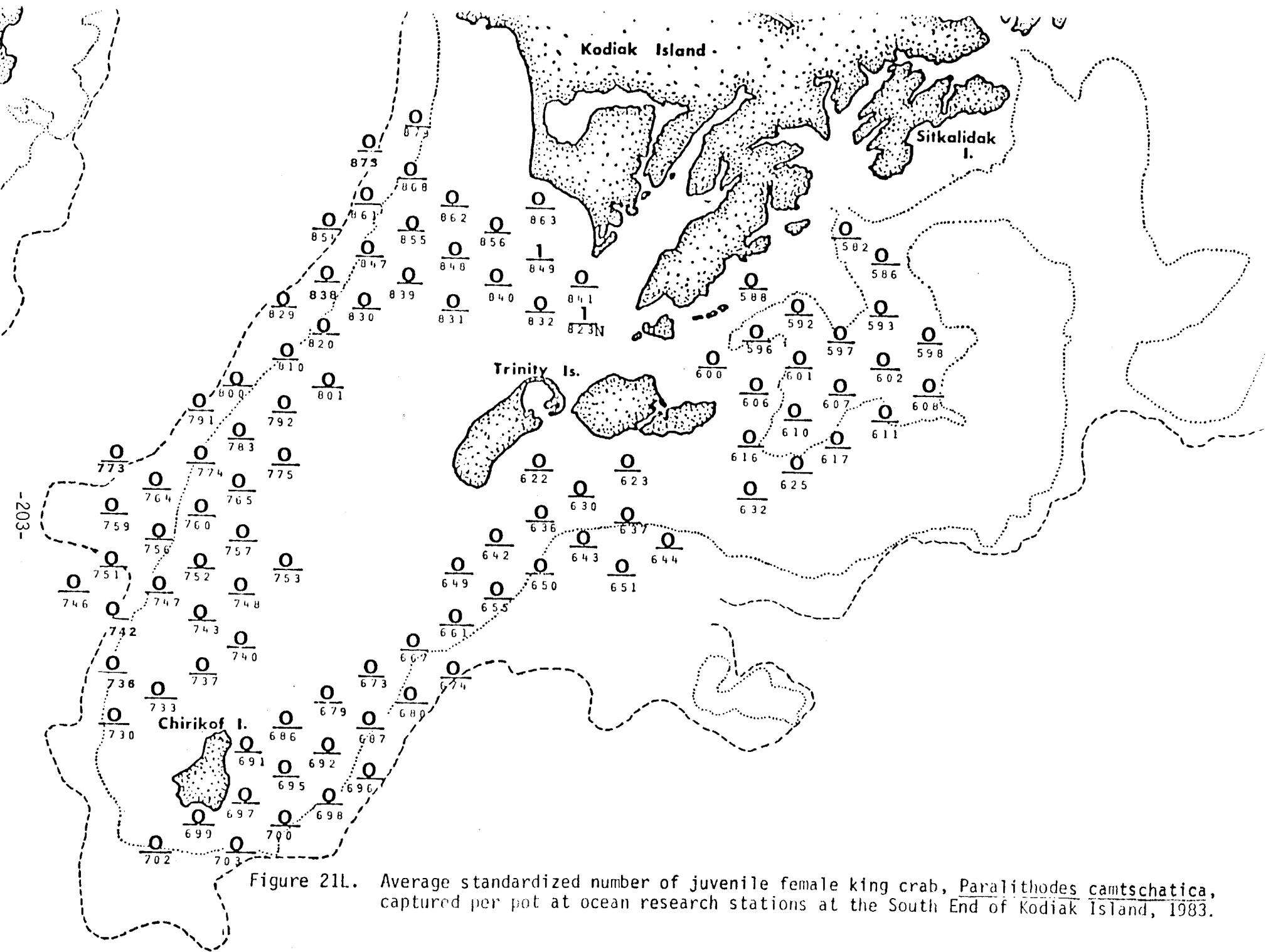


Figure 21L. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1983.

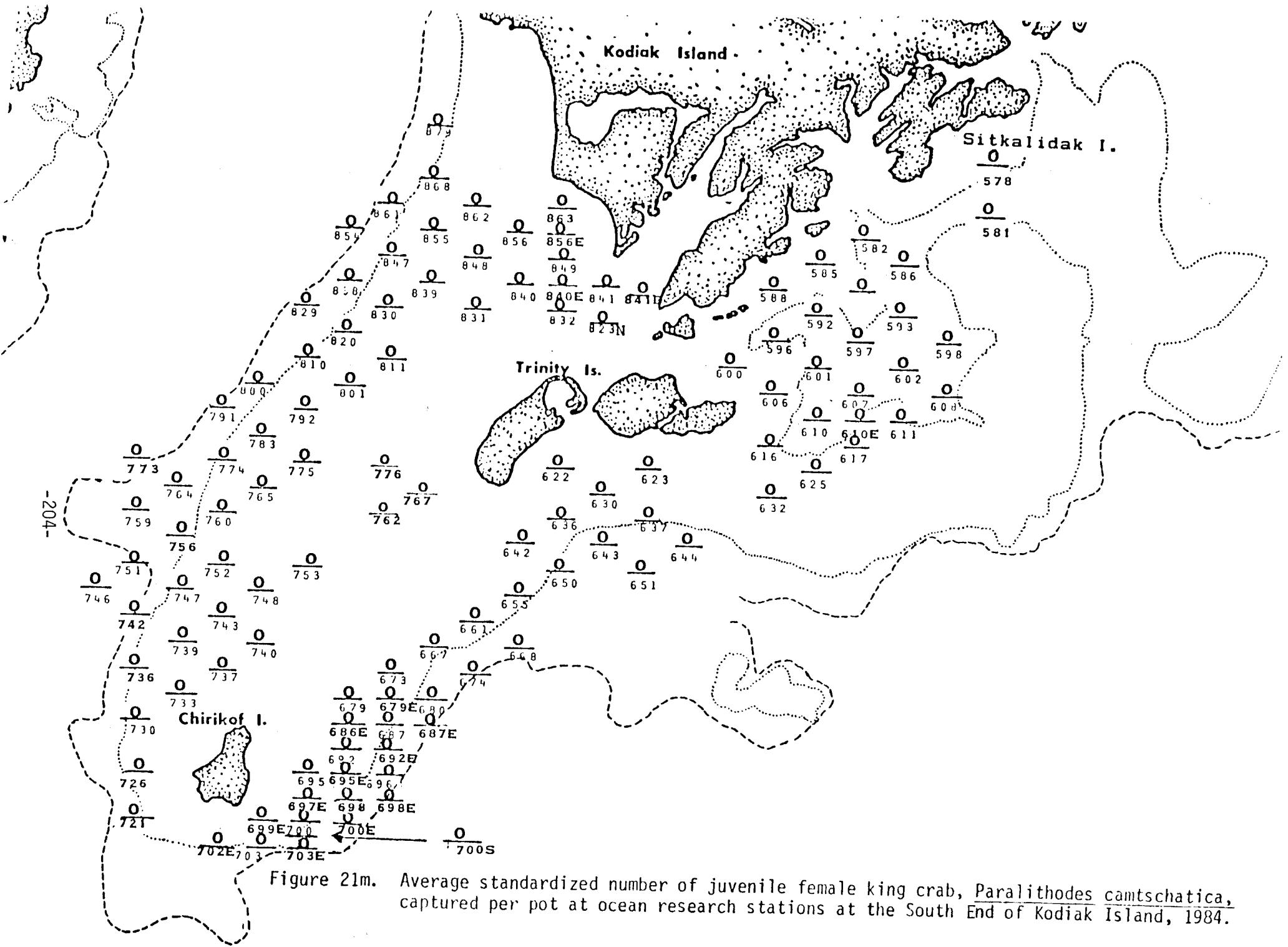


Figure 21m. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at ocean research stations at the South End of Kodiak Island, 1984.

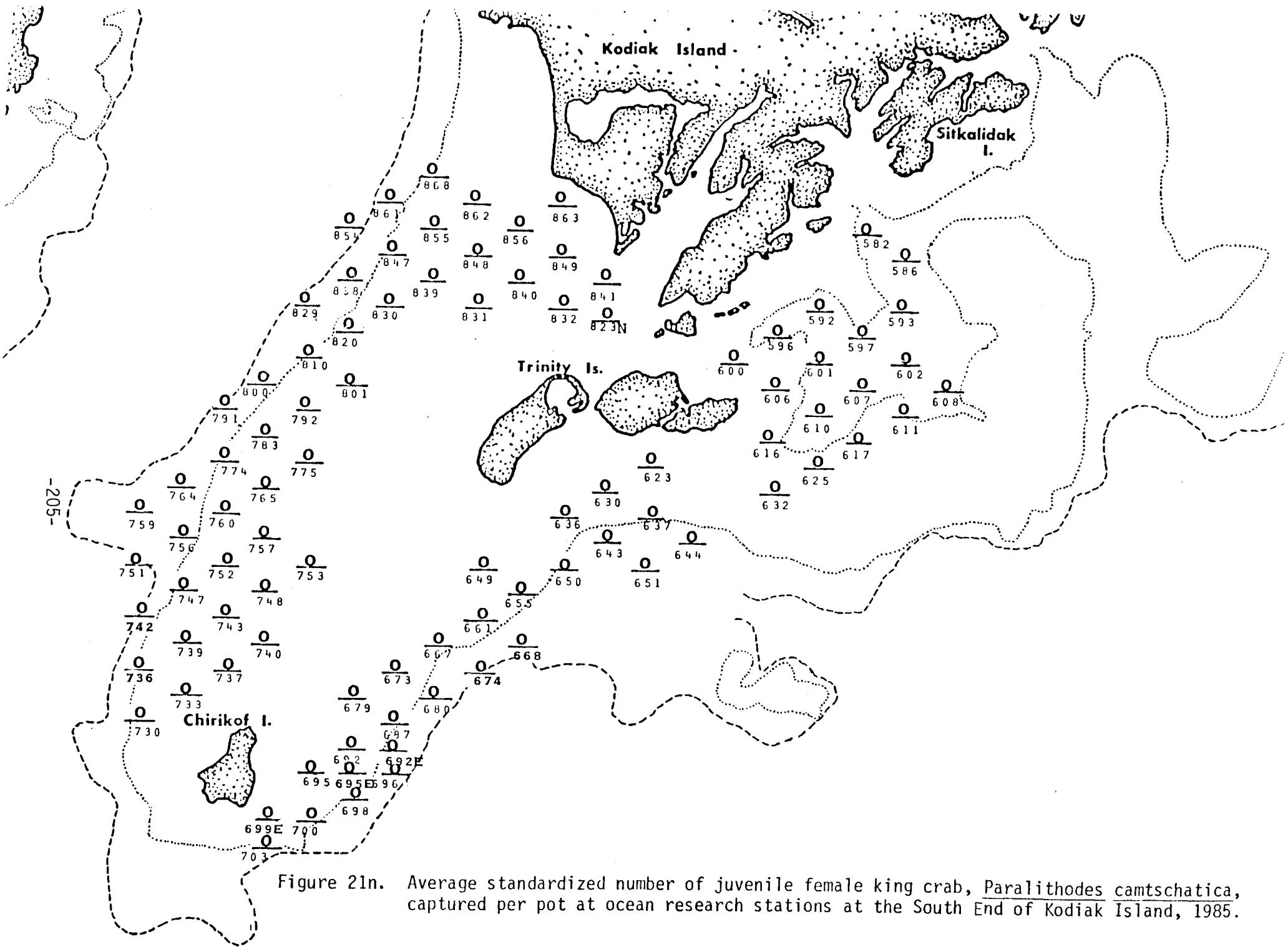


Figure 21n. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at ocean research stations at the South End of Kodiak Island, 1985.

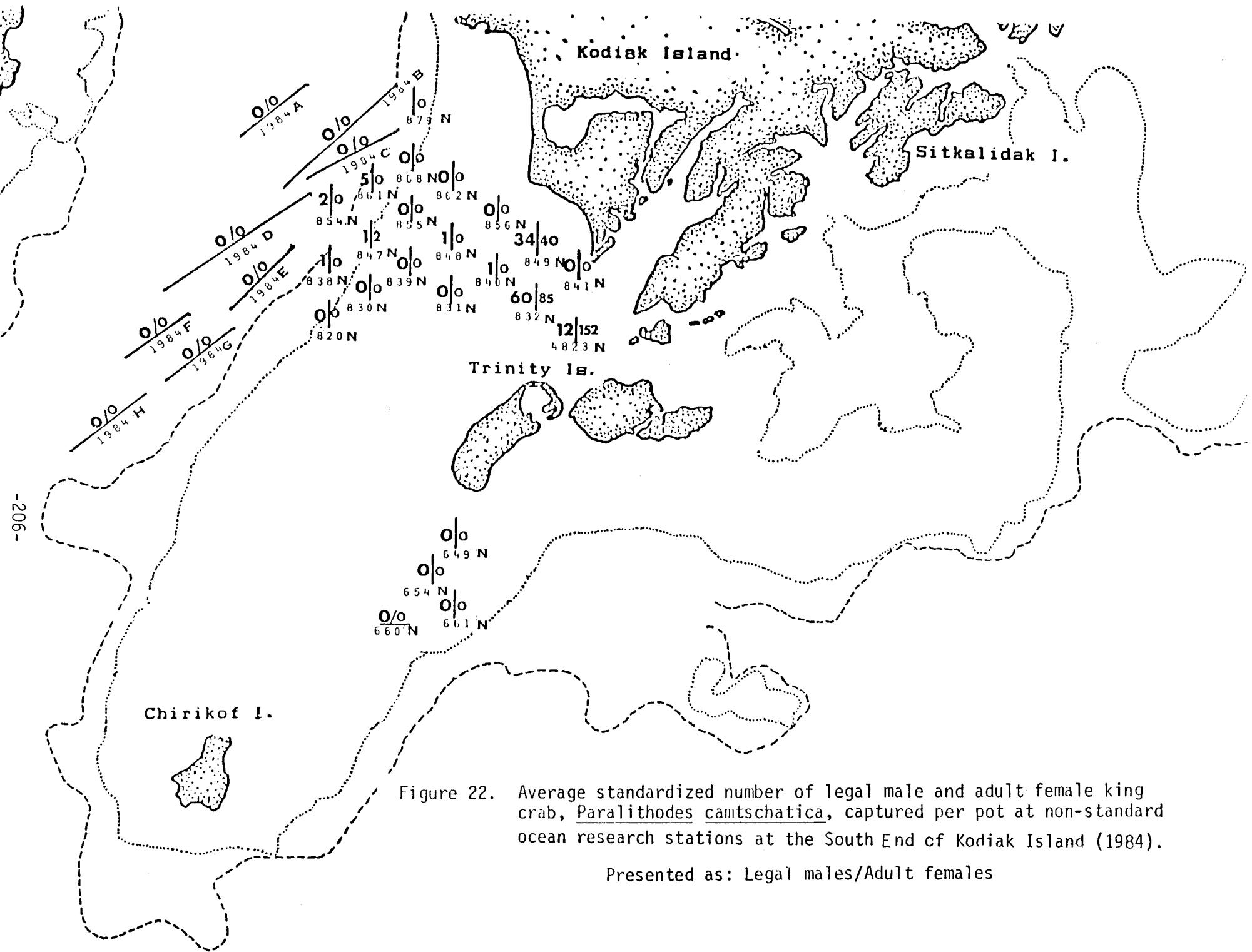
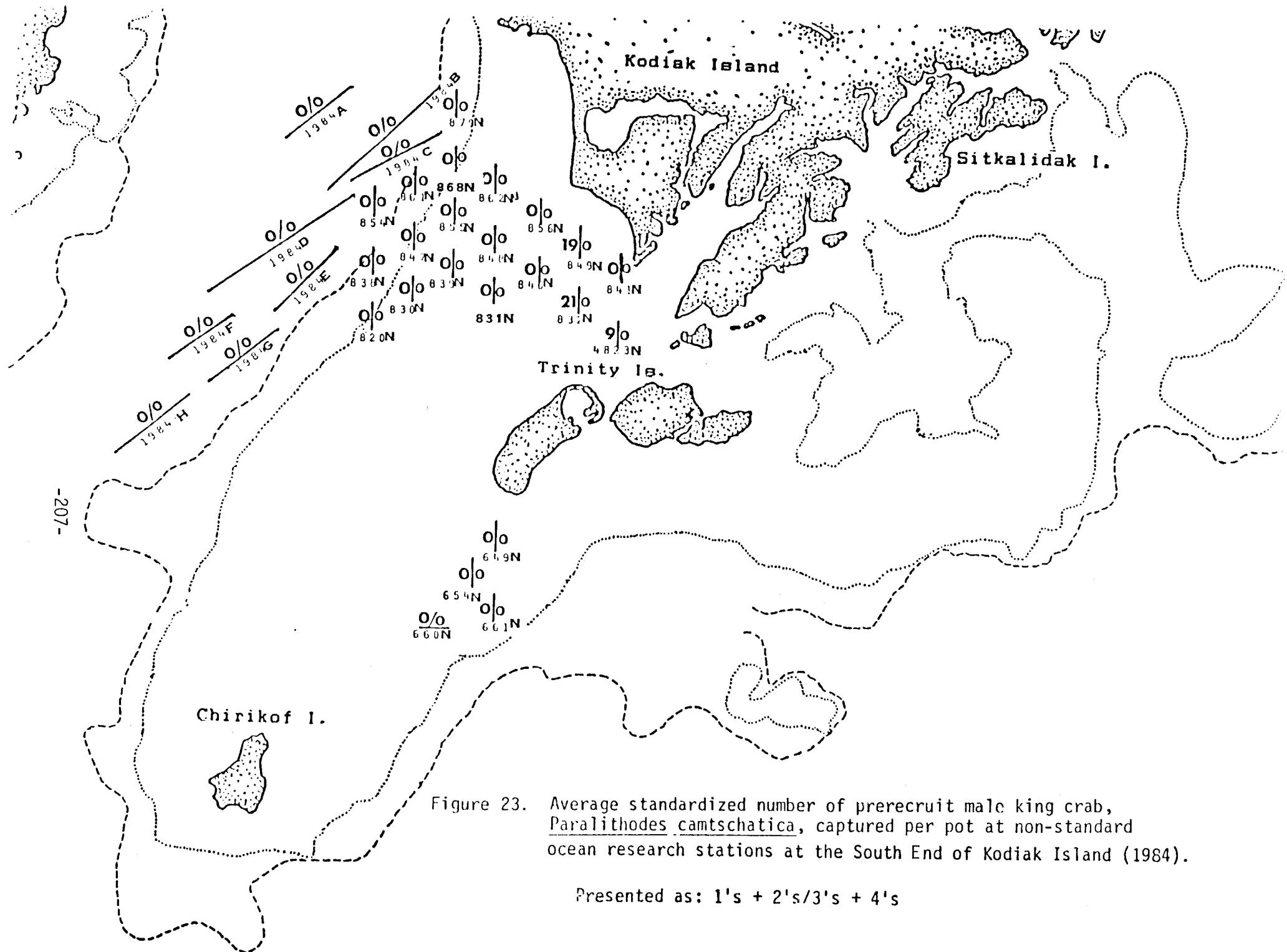


Figure 22. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at non-standard ocean research stations at the South End of Kodiak Island (1984).

Presented as: Legal males/Adult females



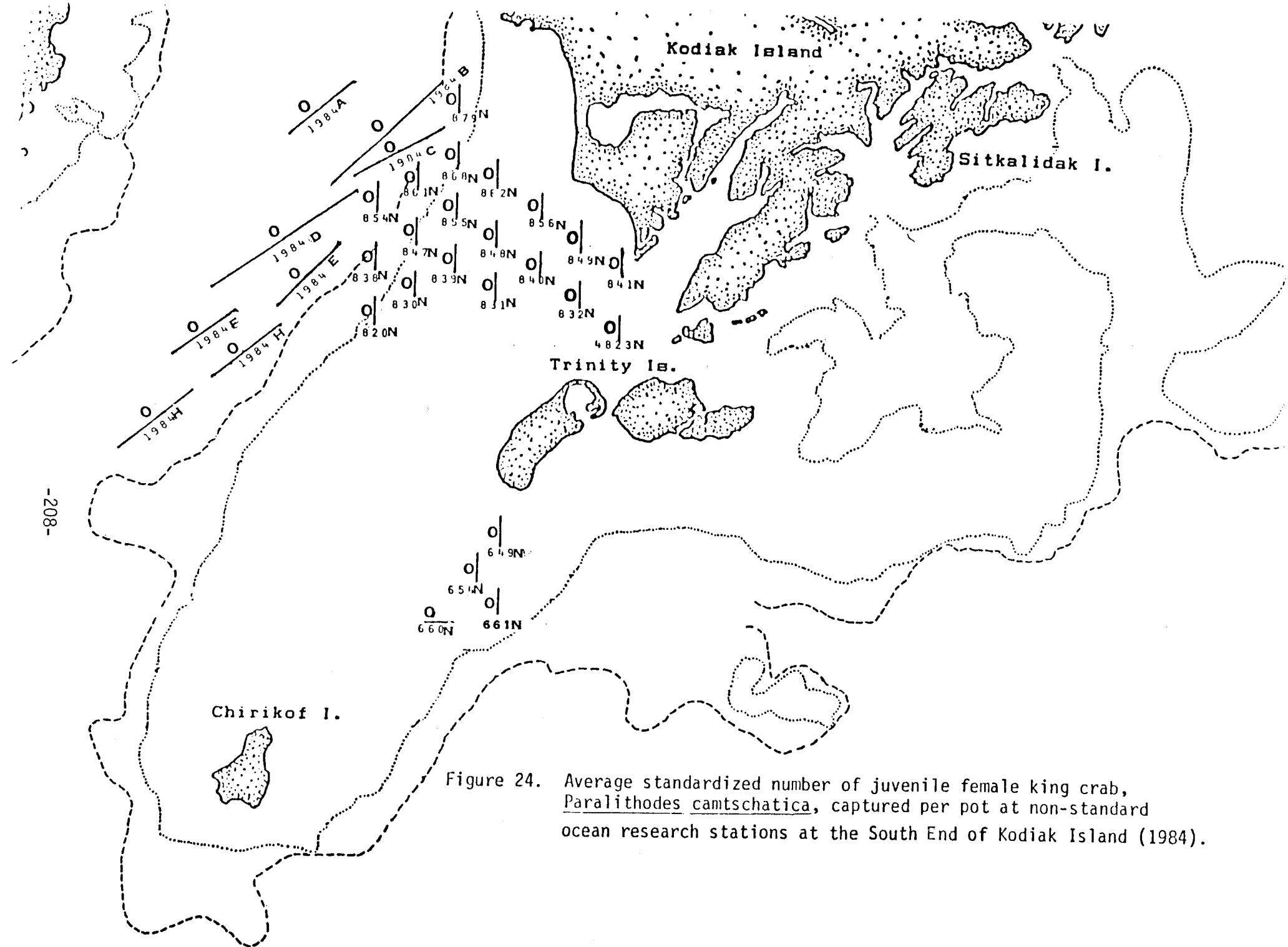


Figure 24. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at non-standard ocean research stations at the South End of Kodiak Island (1984).

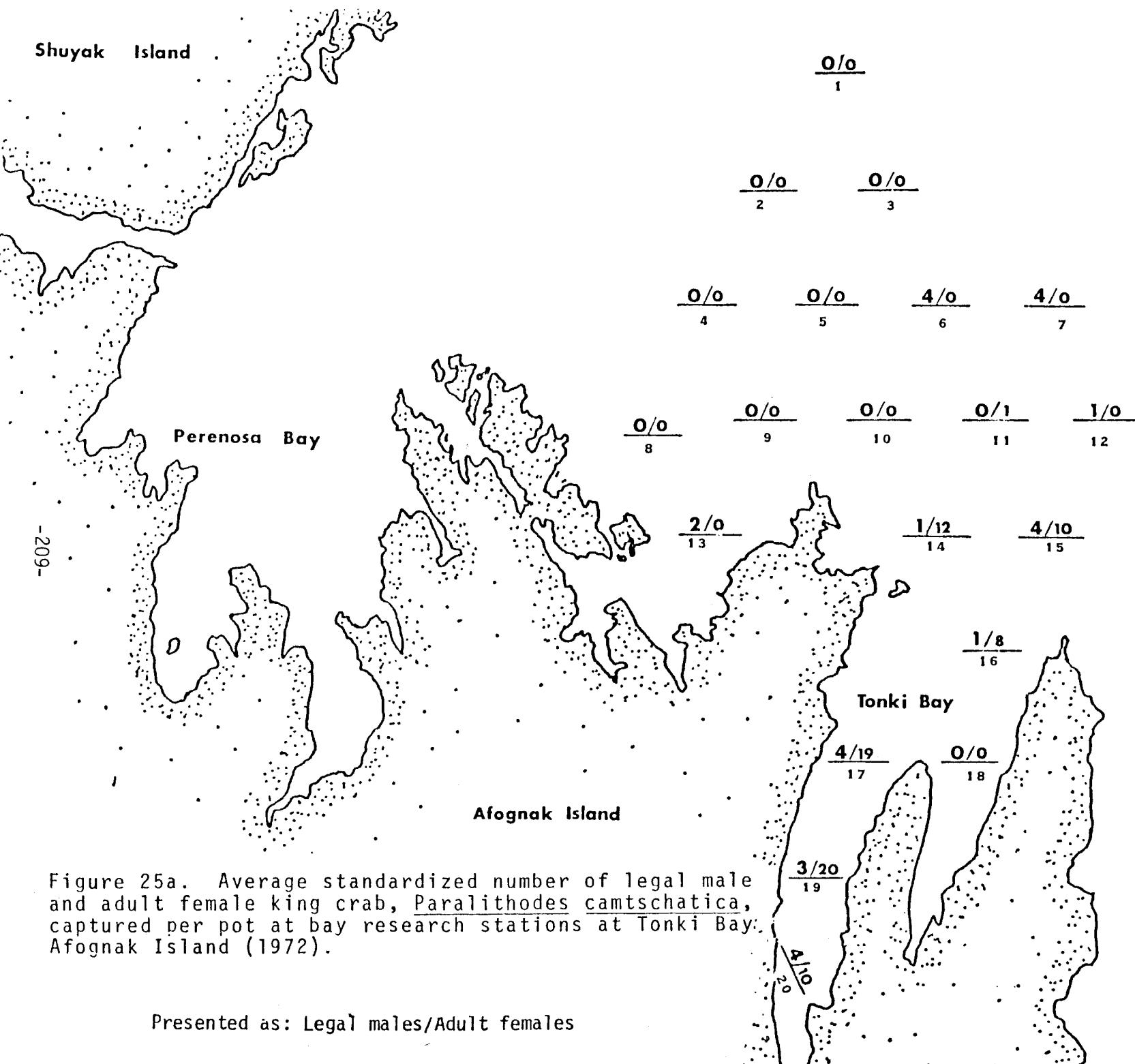


Figure 25a. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Tonki Bay, Afognak Island (1972).

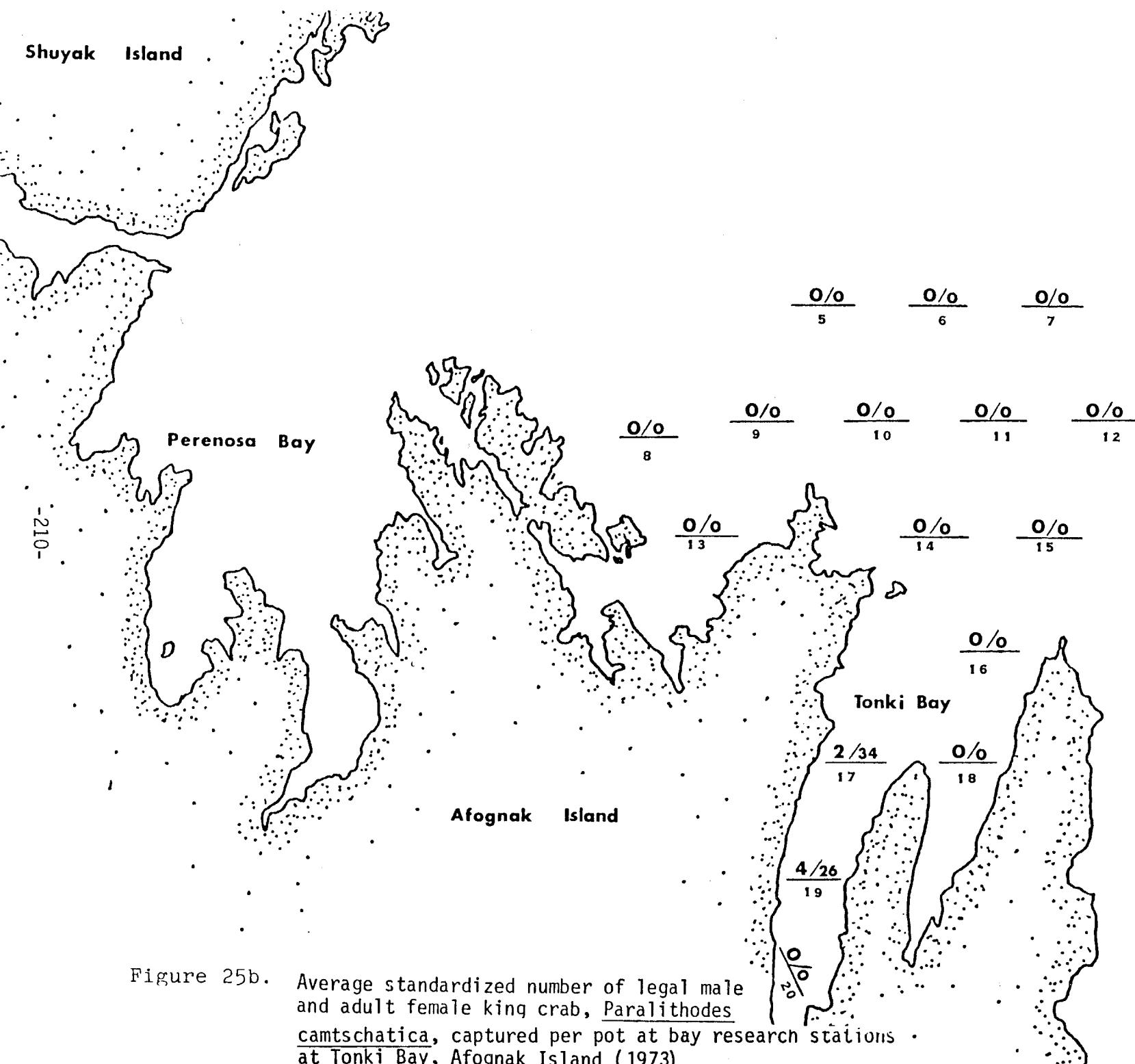


Figure 25b. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Tonki Bay, Afognak Island (1973).

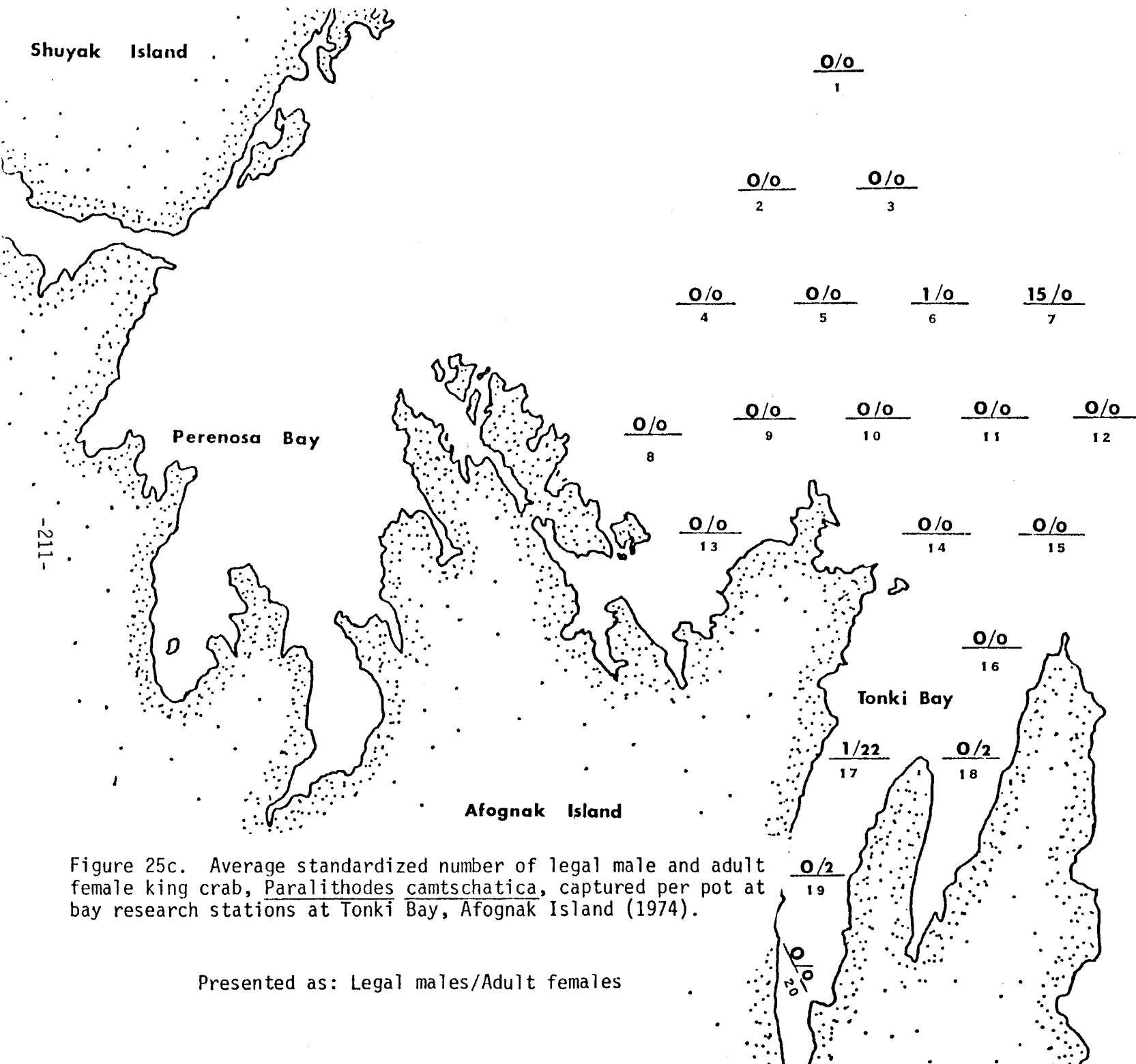


Figure 25c. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Tonki Bay, Afognak Island (1974).

Marmot I.

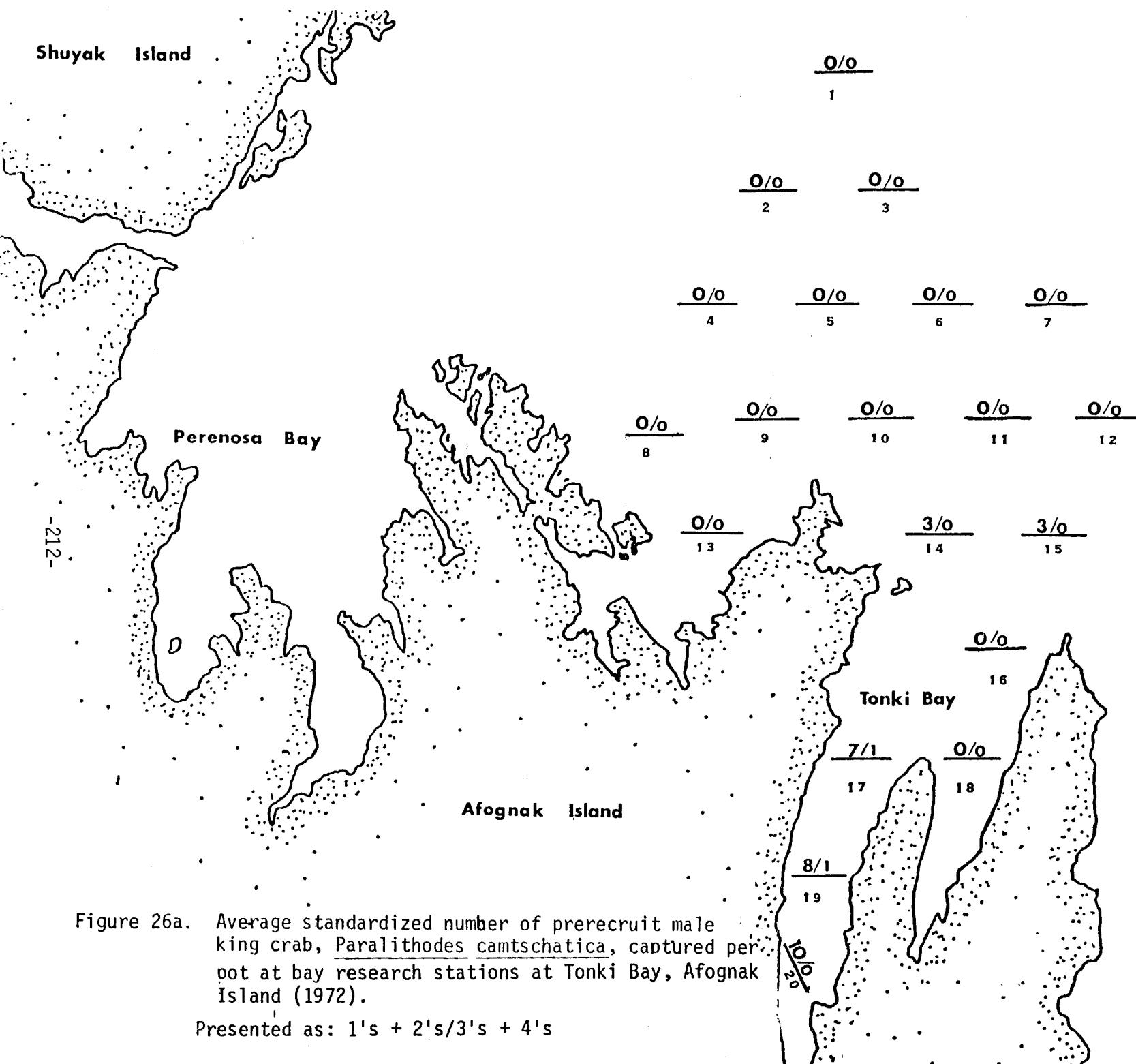
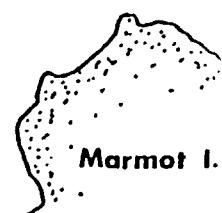


Figure 26a. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Tonki Bay, Afognak Island (1972).

Presented as: 1's + 2's/3's + 4's



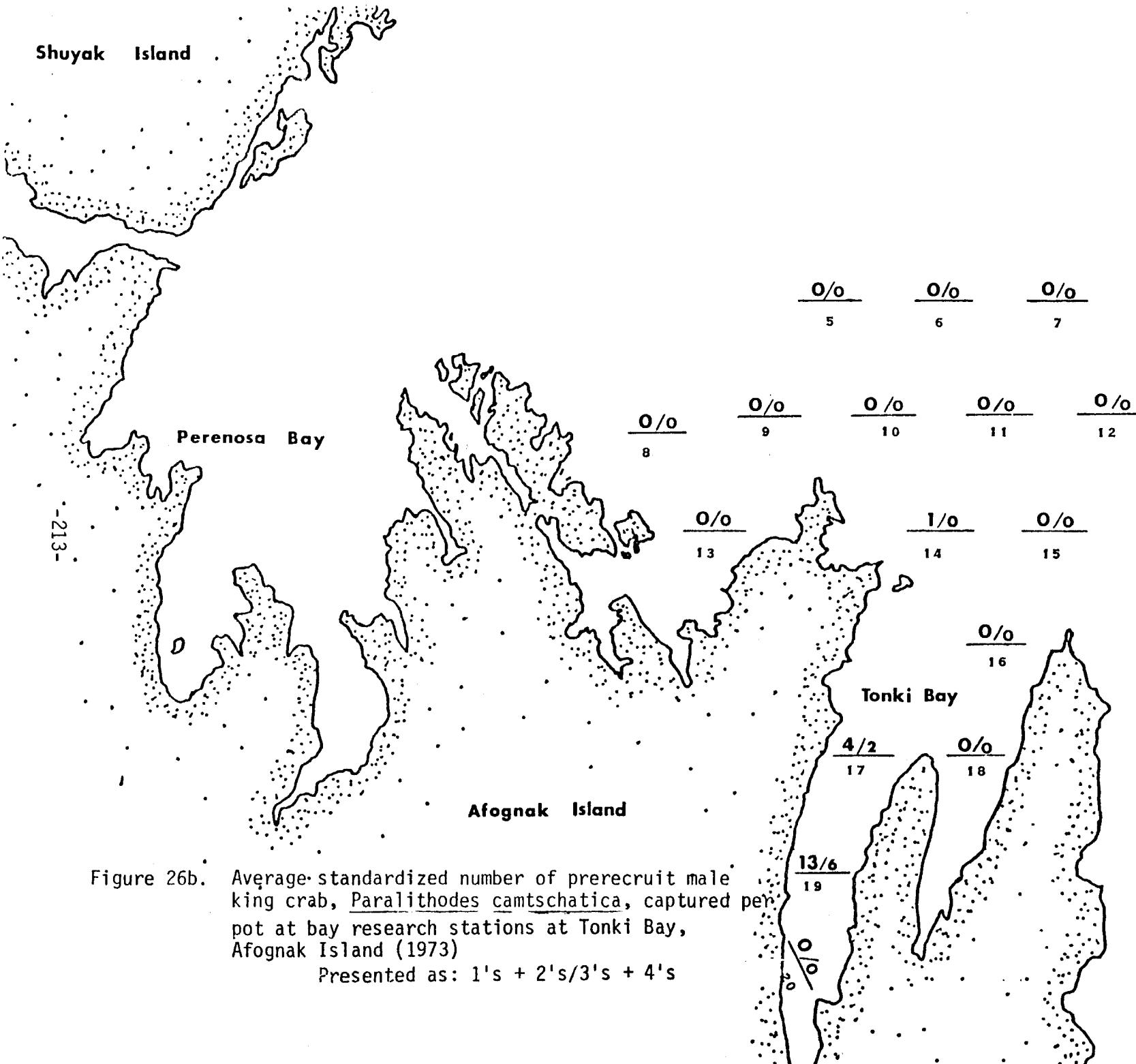


Figure 26b. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Tonki Bay, Afognak Island (1973)

Shuyak Island

0/o

1

0/o

2

0/o

3

0/o

4

0/o

5

0/o

6

0/o

7

0/o

8

0/o

9

0/o

10

0/o

11

0/o

12

0/o

13

0/o

14

0/o

15

0/o

16

Tonki Bay

0/o

17

0/o

18

0/o

19

Afognak Island

Marmot I.

Figure 26c. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Tonki Bay, Afognak Island (1974).

Presented as: 1's + 2's/3's + 4's

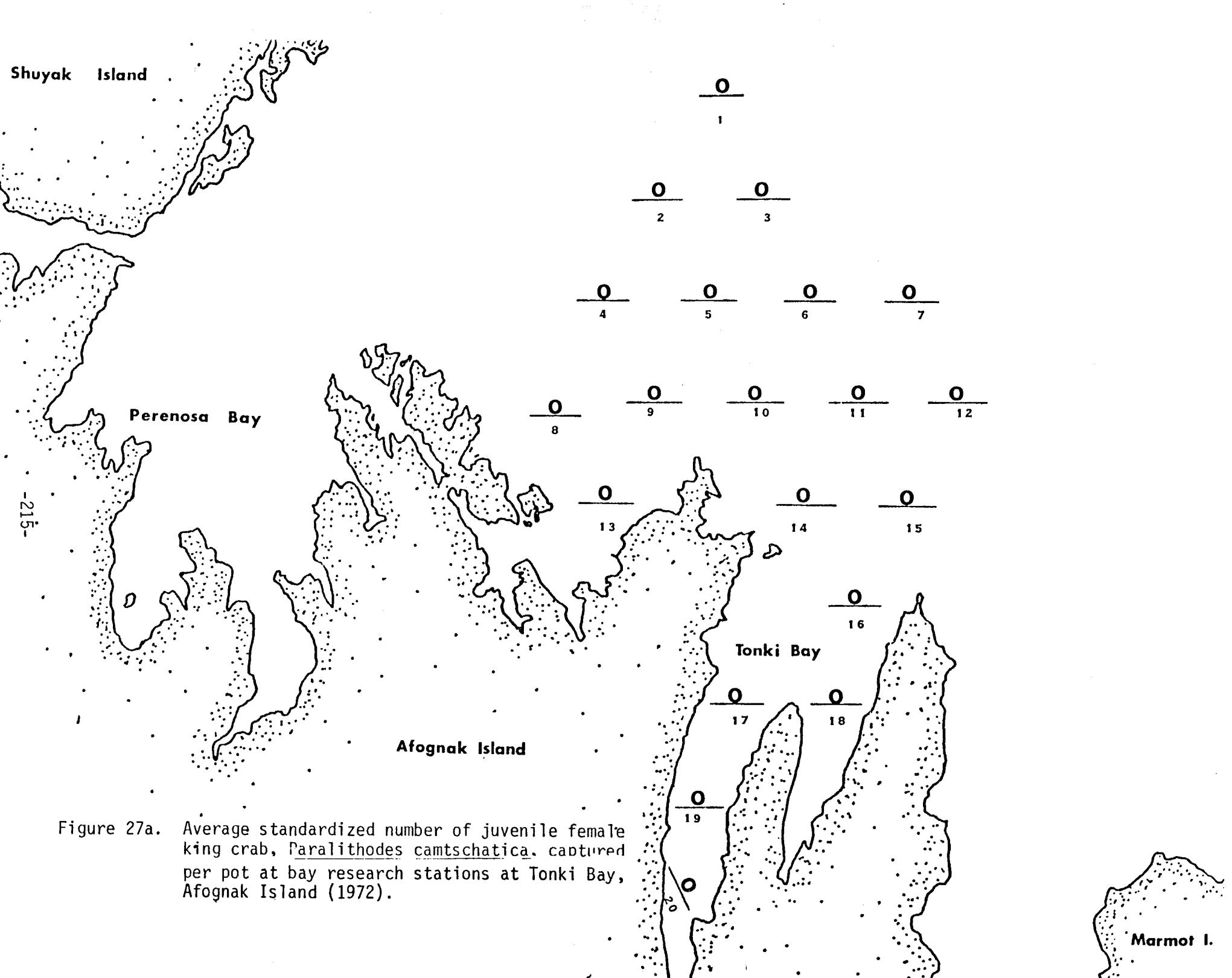


Figure 27a. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Tonki Bay, Afognak Island (1972).

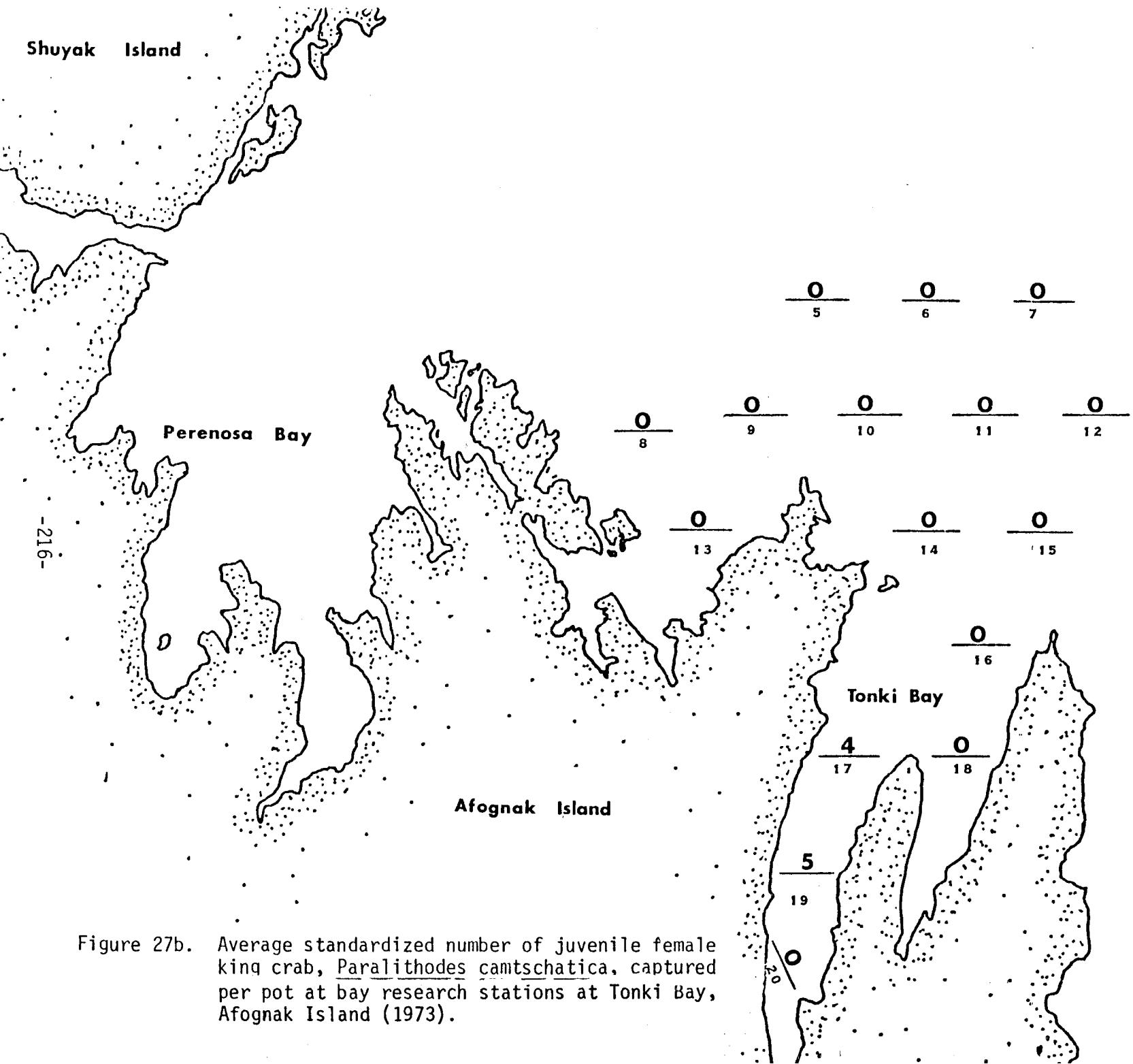


Figure 27b. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Tonki Bay, Afognak Island (1973).

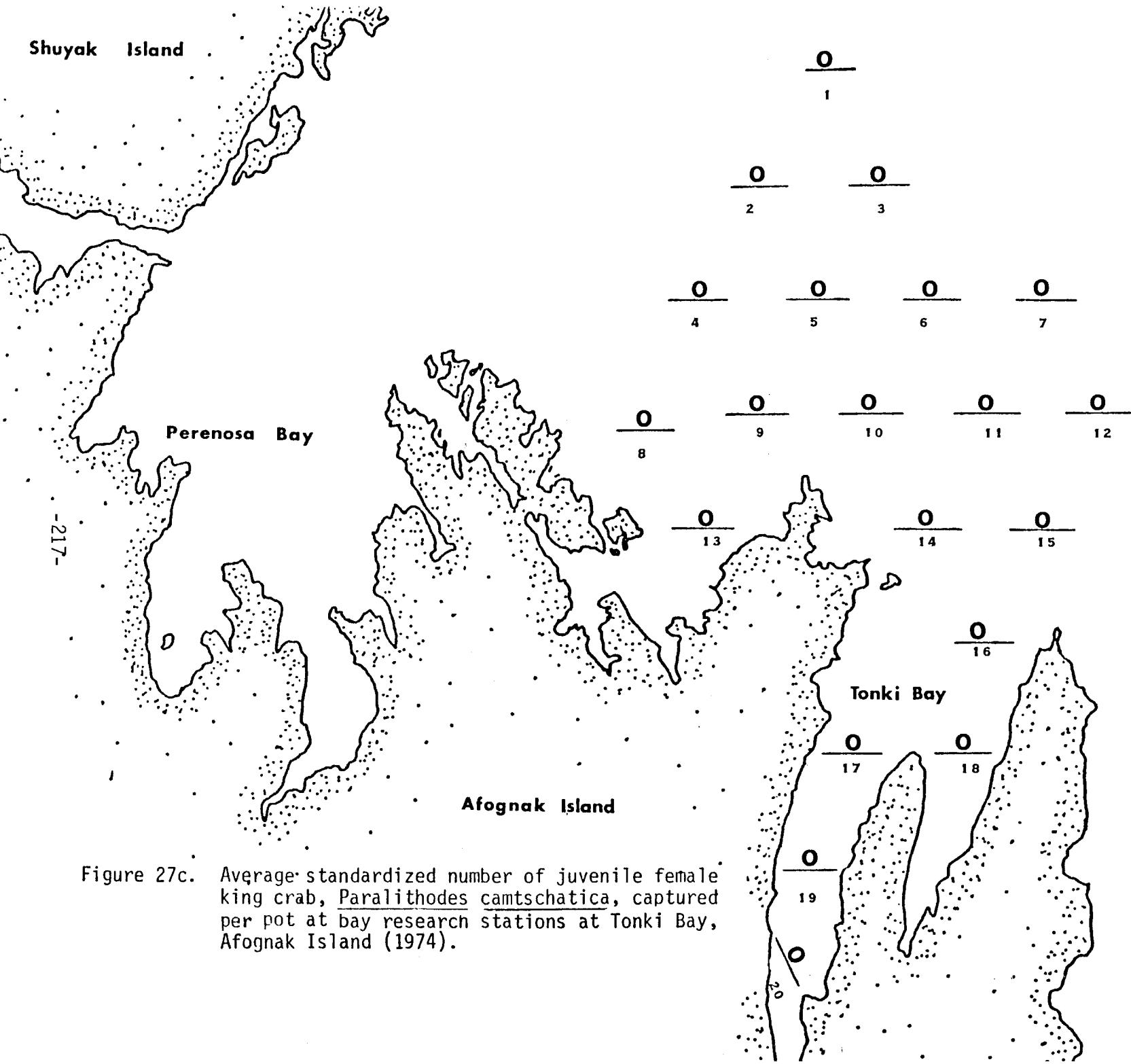
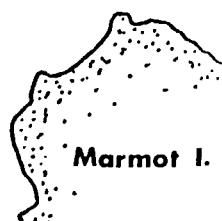


Figure 27c. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Tonki Bay, Afognak Island (1974).



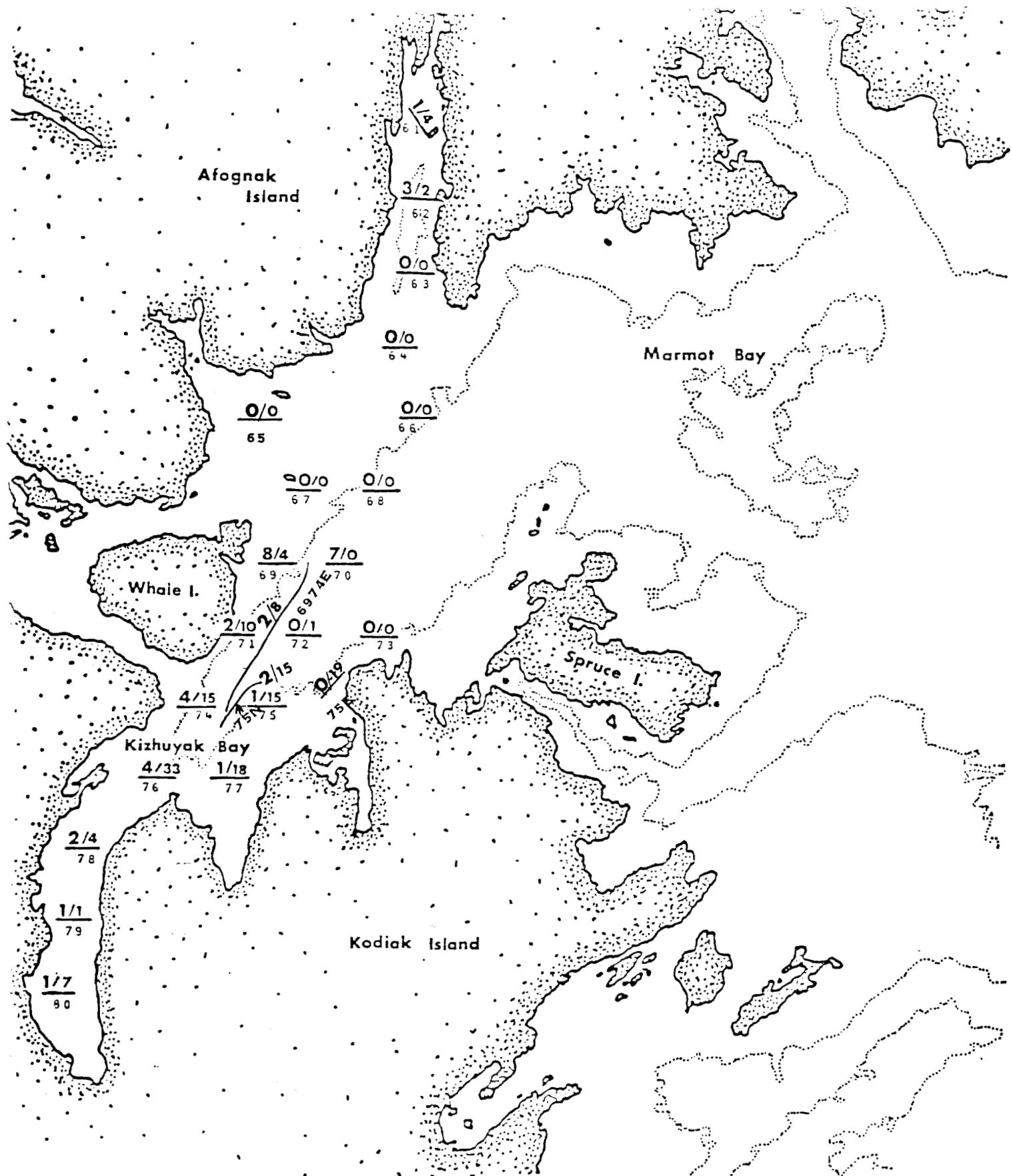


Figure 28a. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1972).

Presented as: Legal males/Adult females

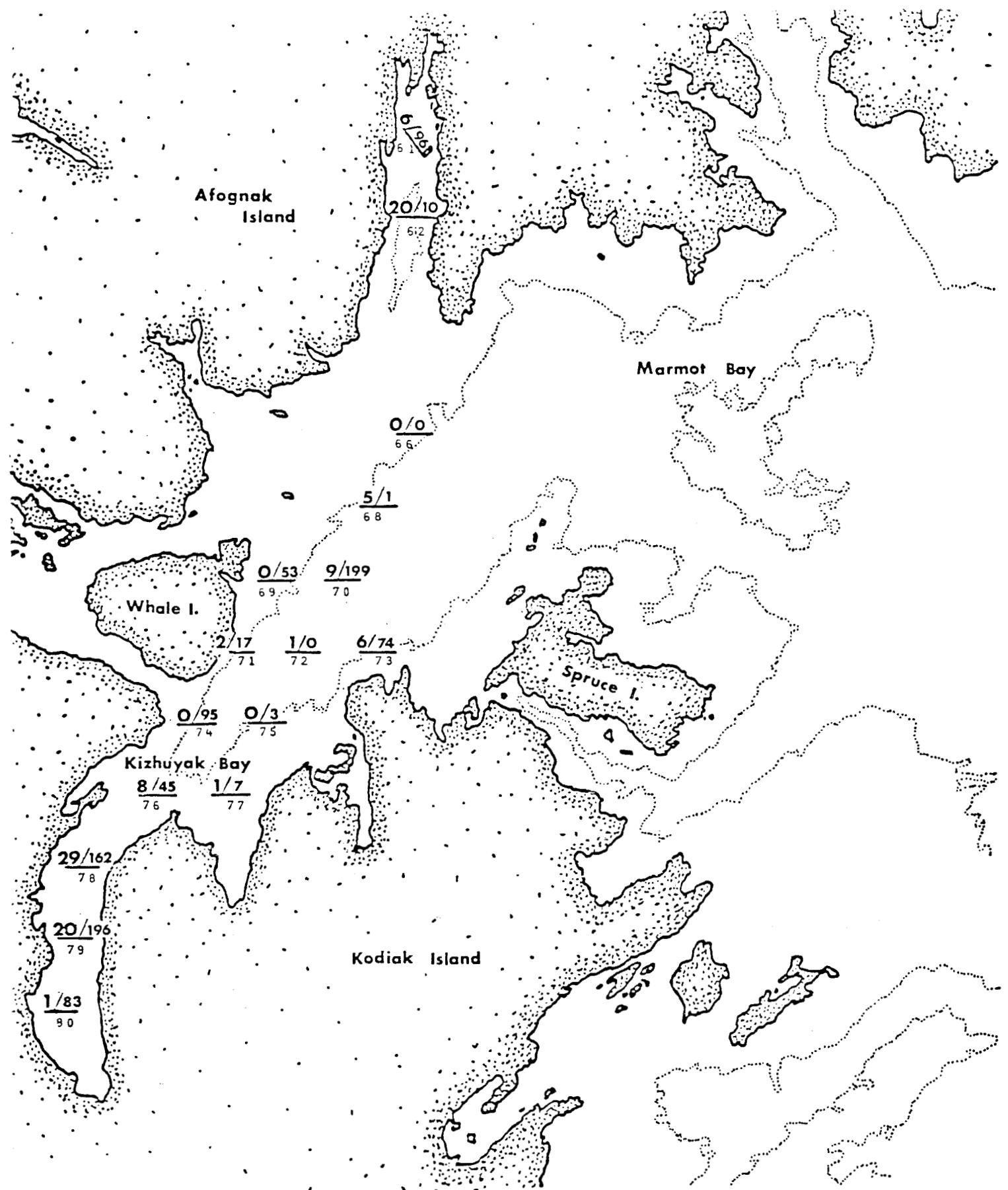


Figure 28b. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1973).

Presented as: Legal males/Adult females

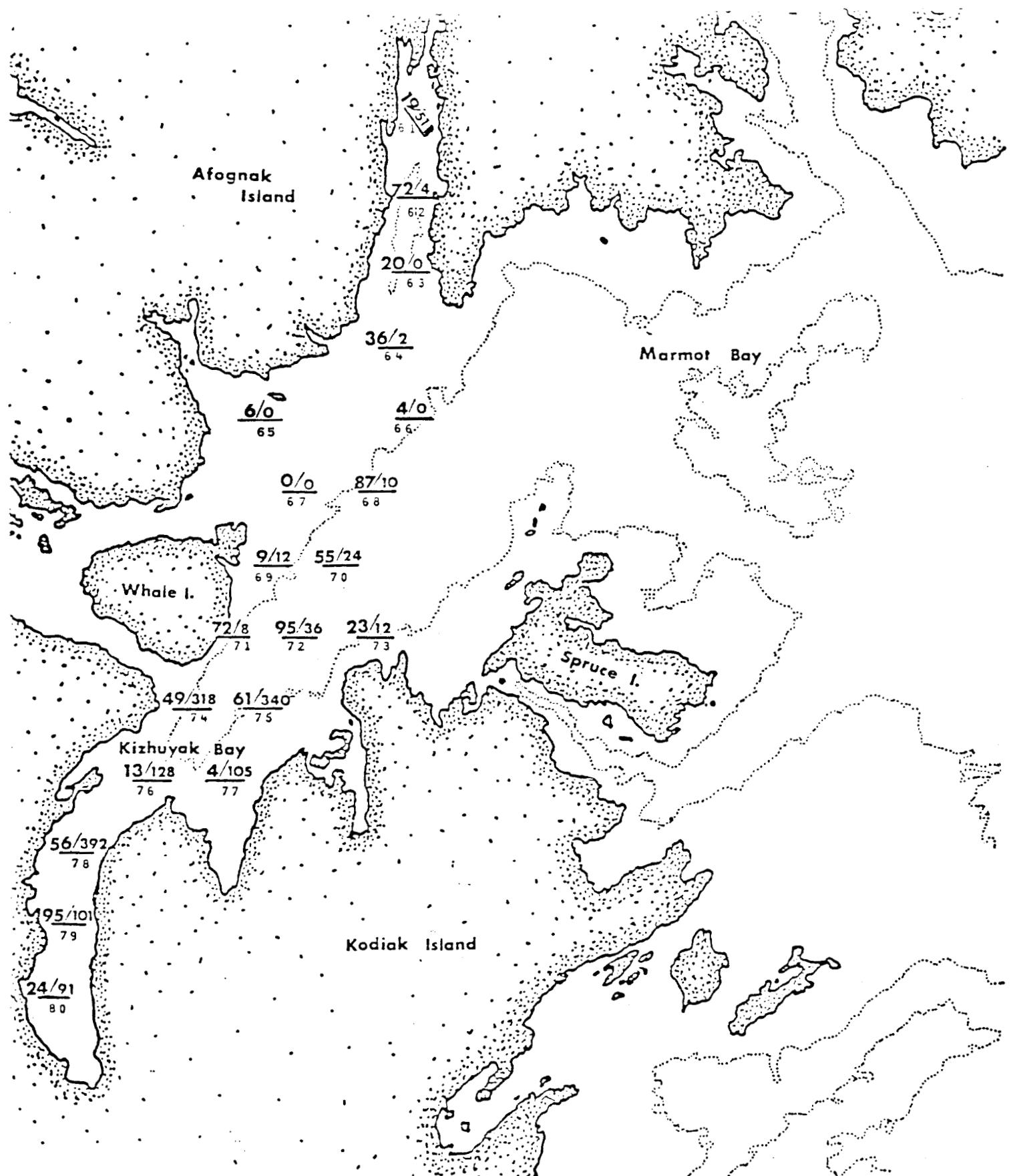


Figure 28c. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1974).

Presented as: Legal males/Adult females

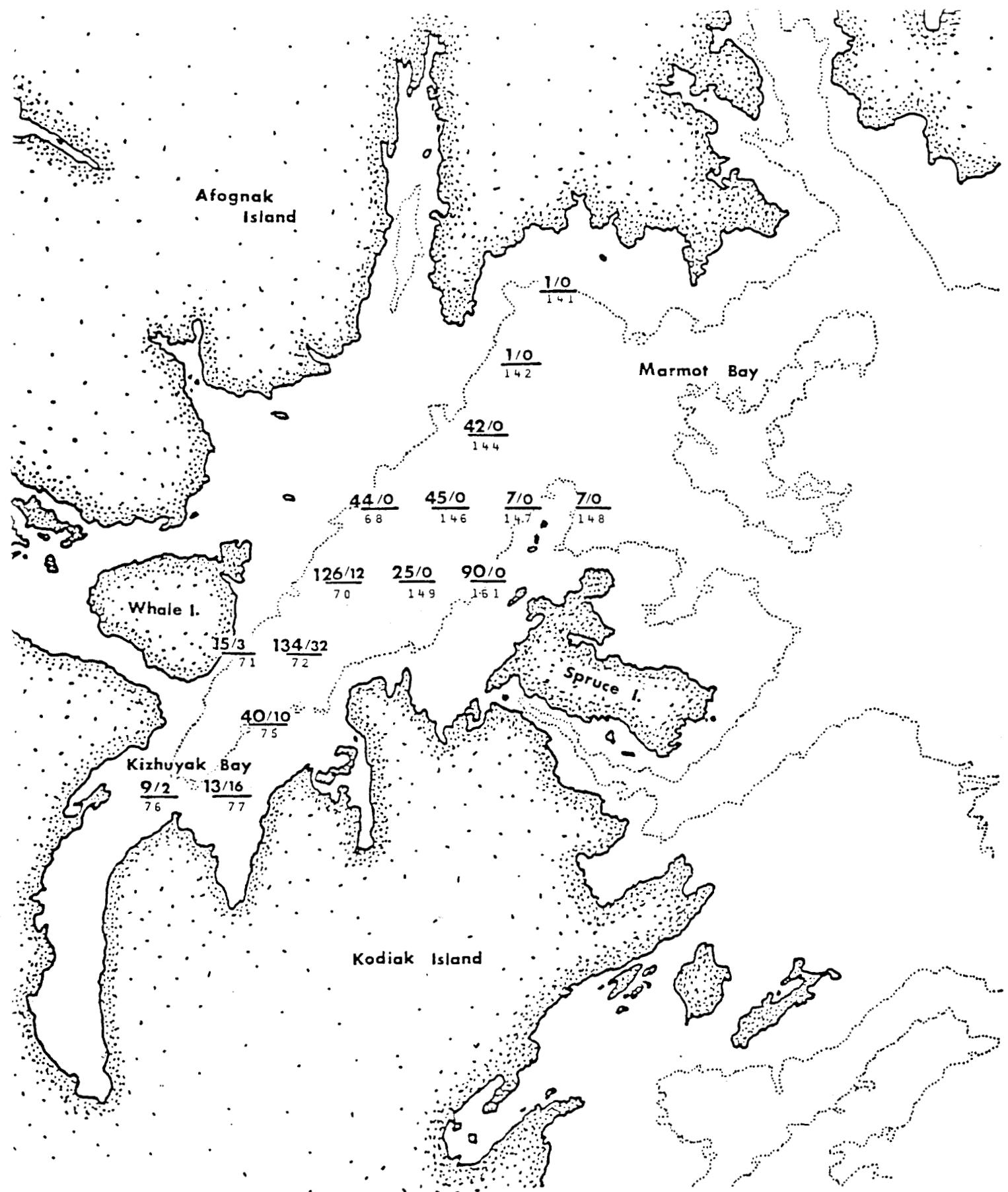


Figure 28d. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1975).

Presented as: Legal males/Adult females

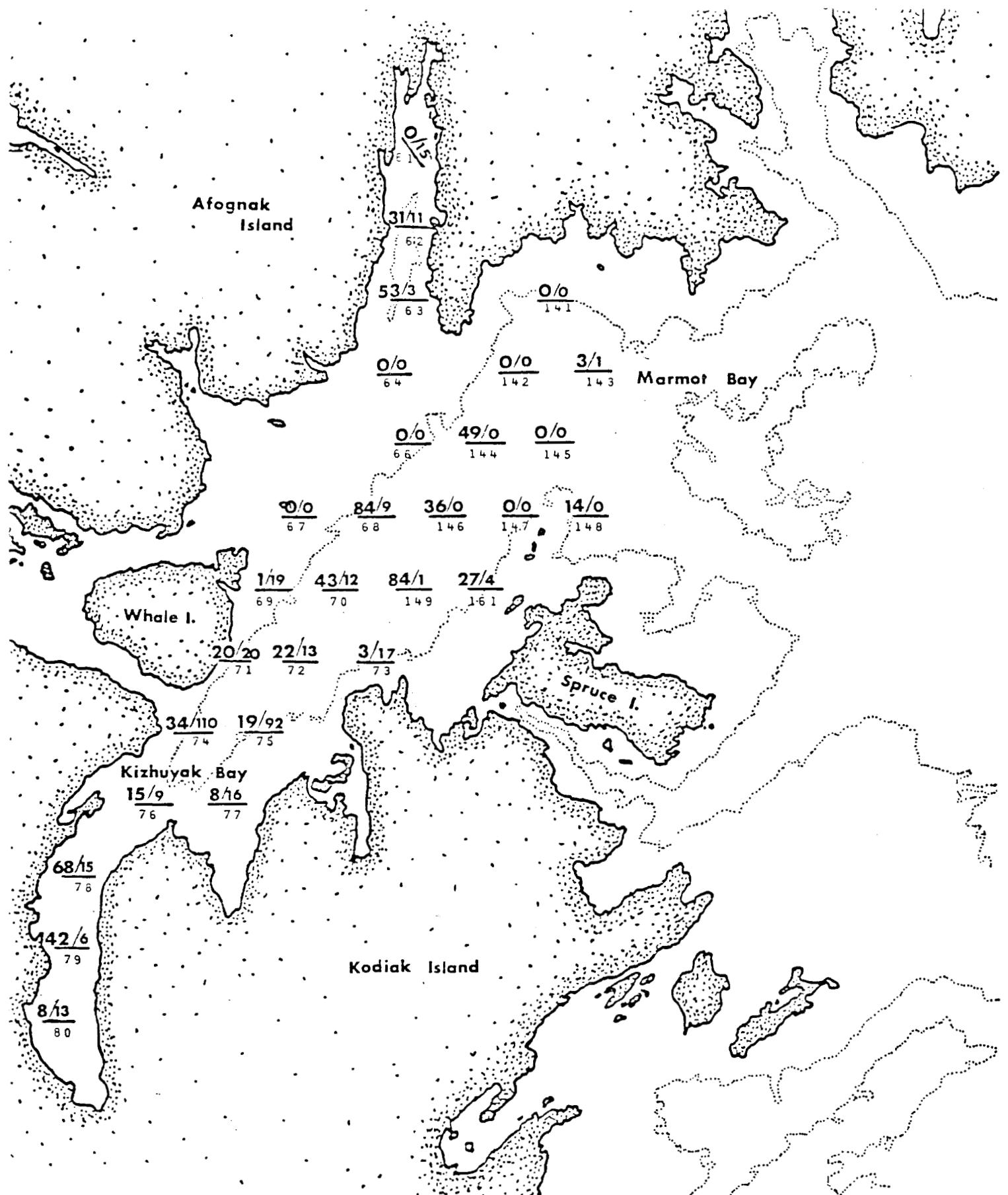


Figure 28e. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1976).

Presented as: Legal males/Adult females

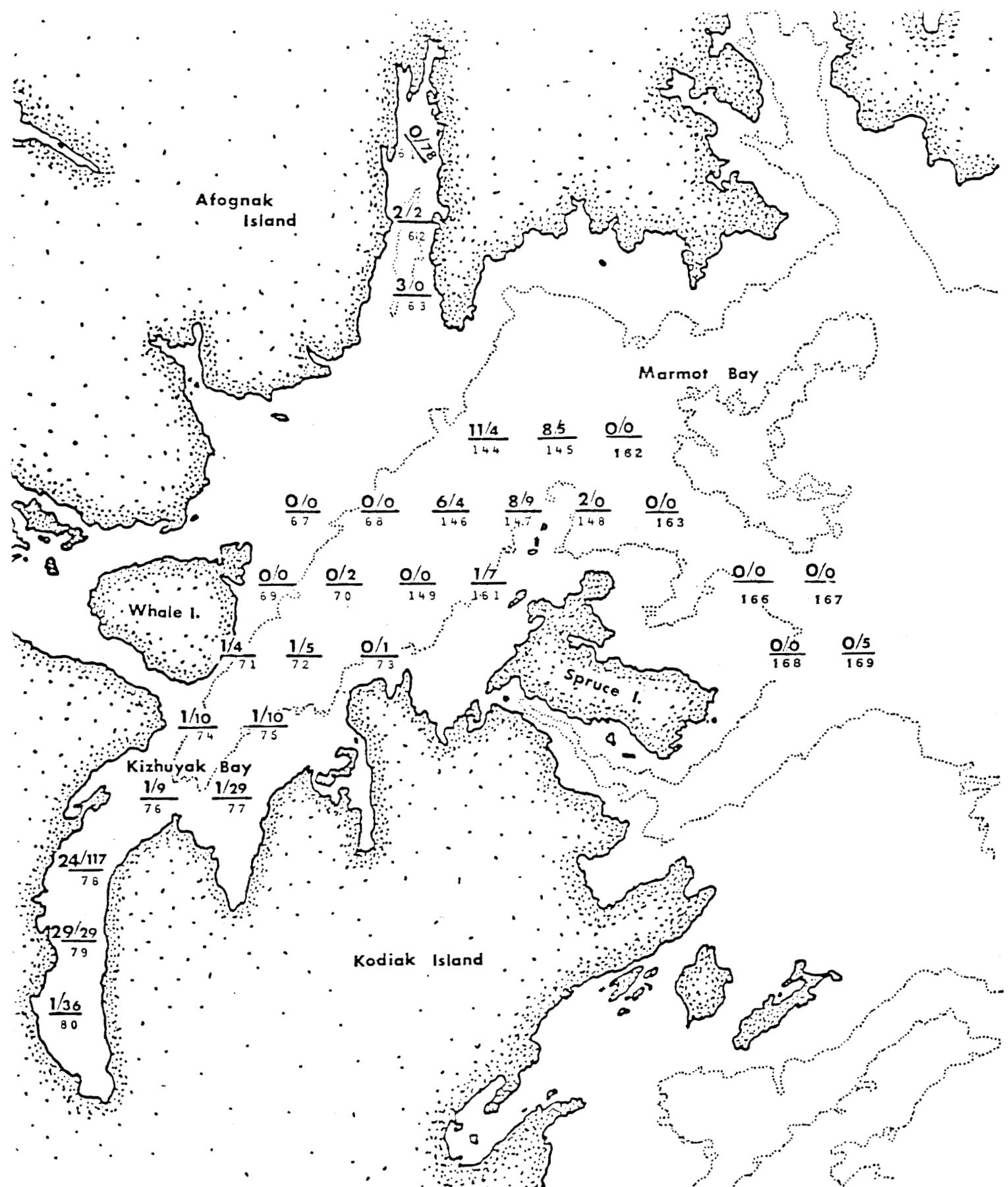


Figure 28f. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1977).

Presented as: Legal males/Adult females

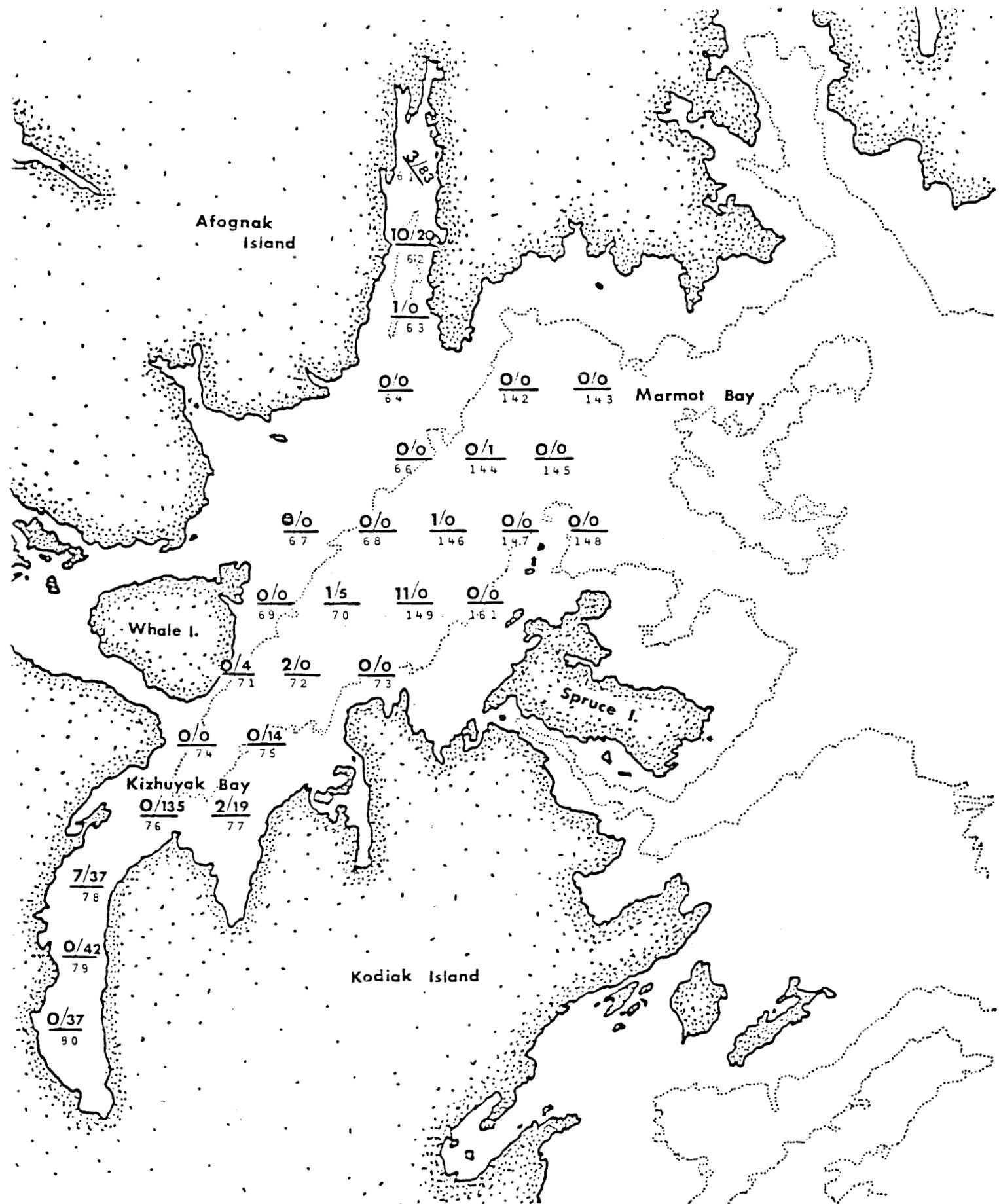


Figure 28g. Average standardized number of legal male and adult female king crab *Paralithodes camtschatica*, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1979).

Presented as: Legal males/Adult females

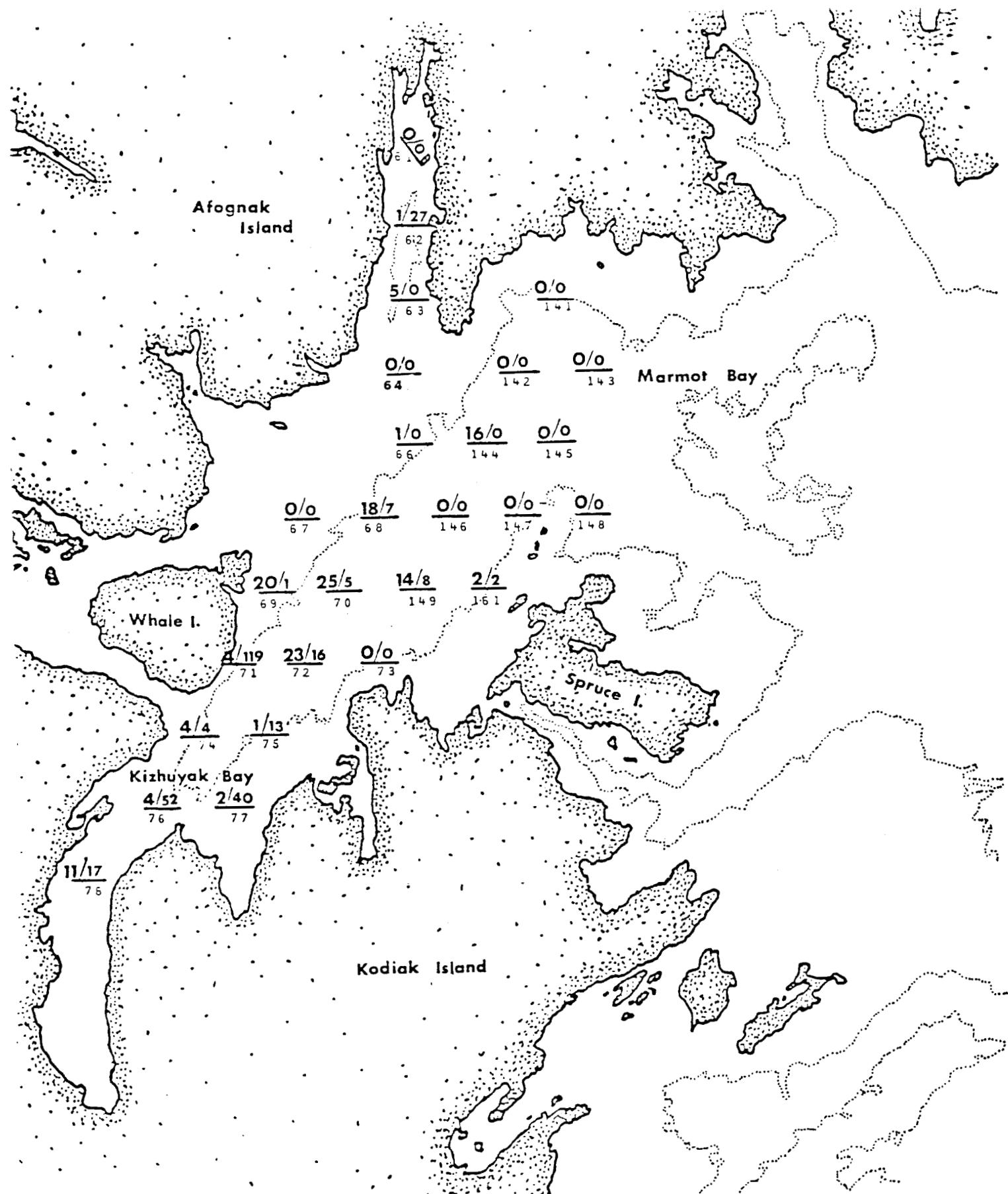


Figure 28h. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research at Marmot and Kizhuyak Bays, Kodiak Island (1980).

Presented as: Legal males/Adult females

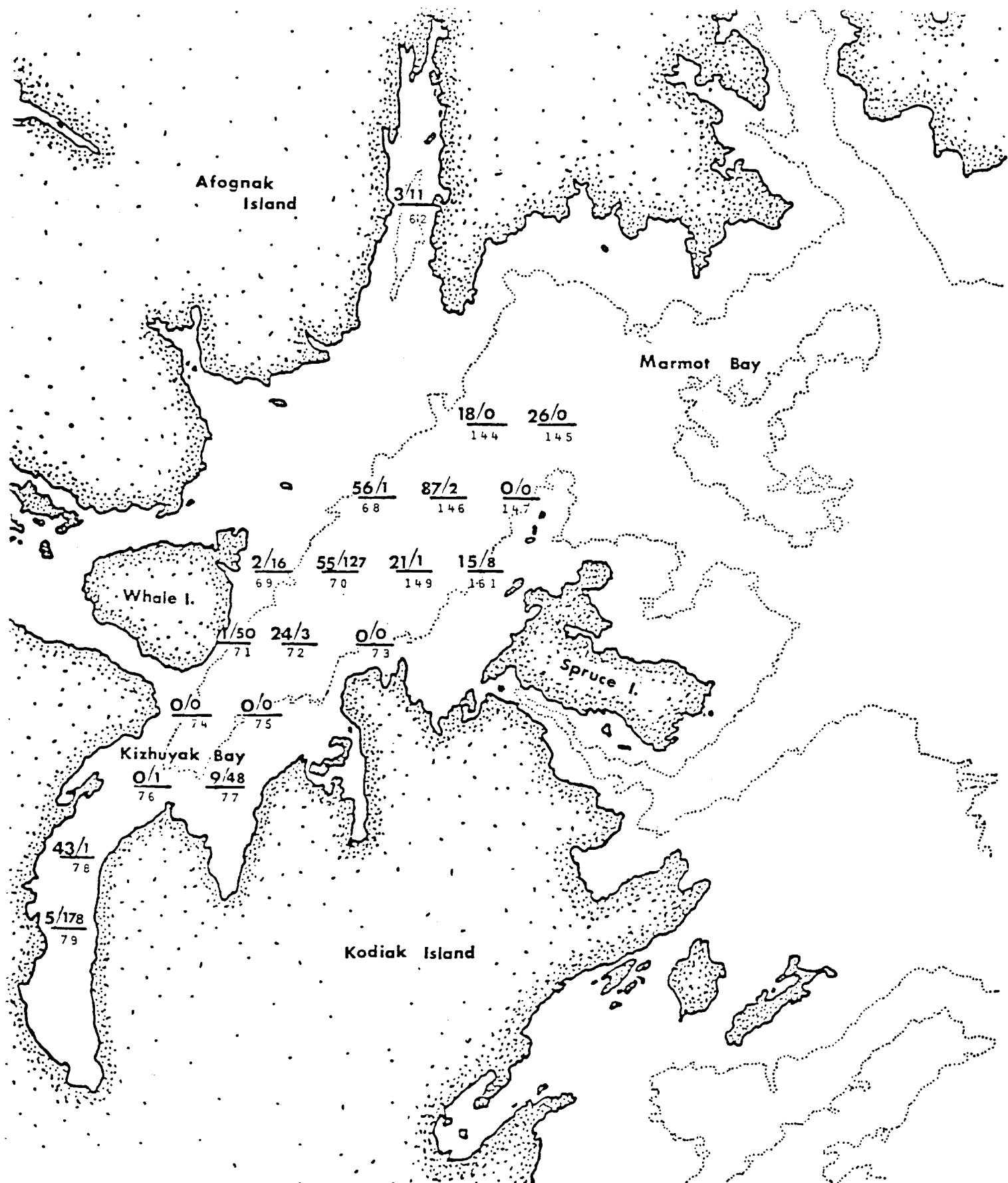


Figure 28i. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1981).

Presented as: Legal males/Adult females

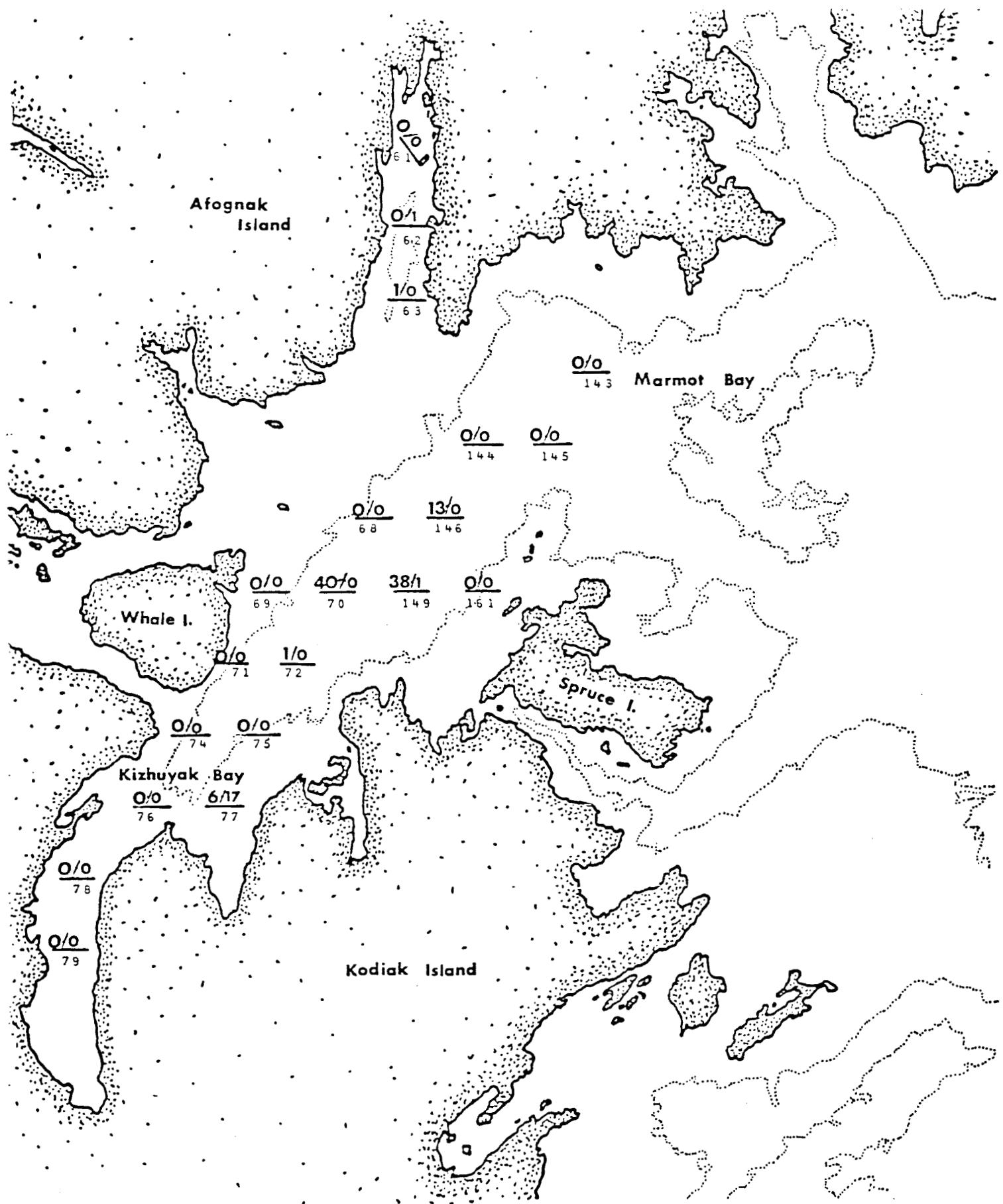


Figure 28j. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1982).

Presented as: Legal males/Adult females

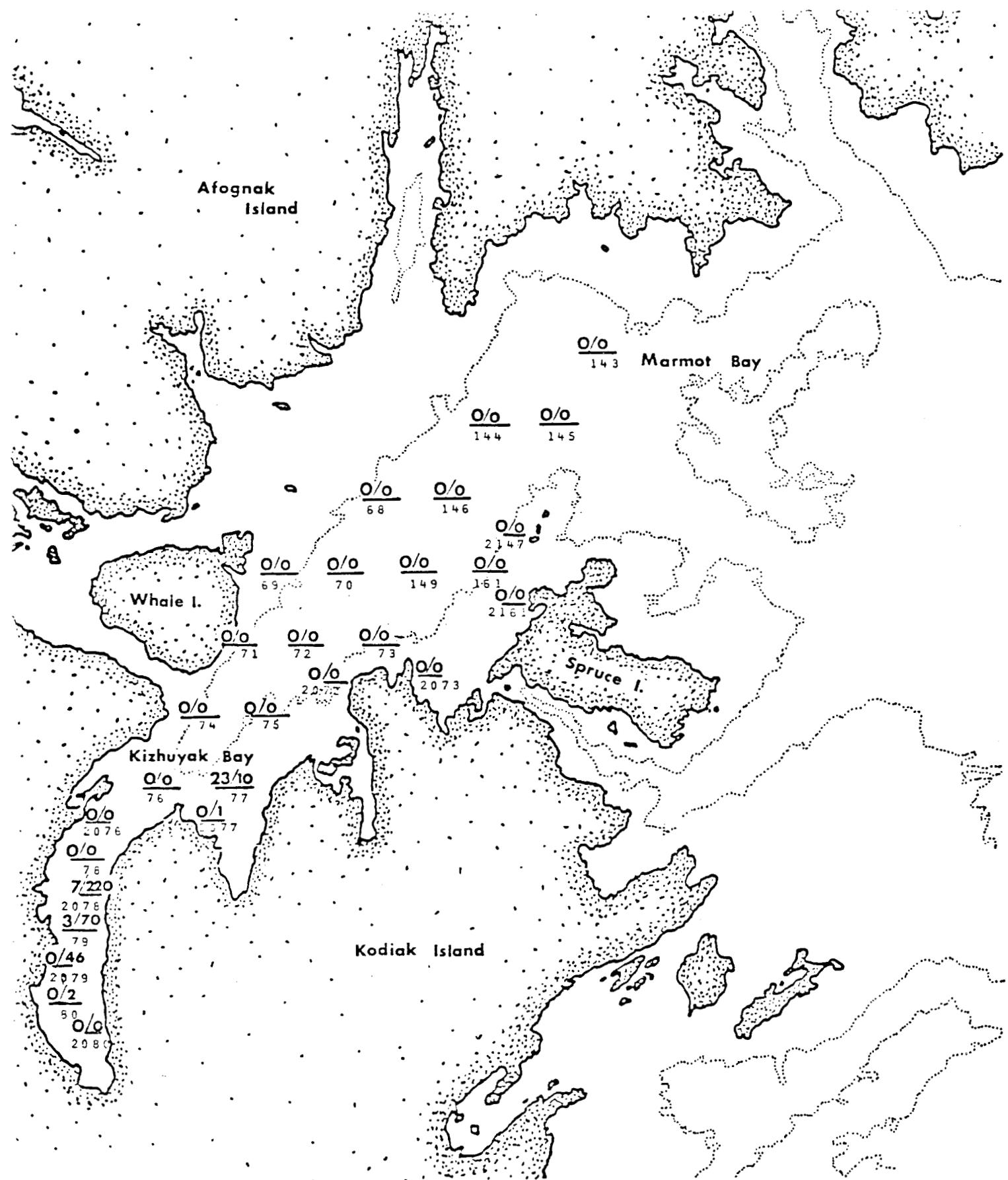


Figure 28k. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1983).

Presented as: Legal males/Adult females

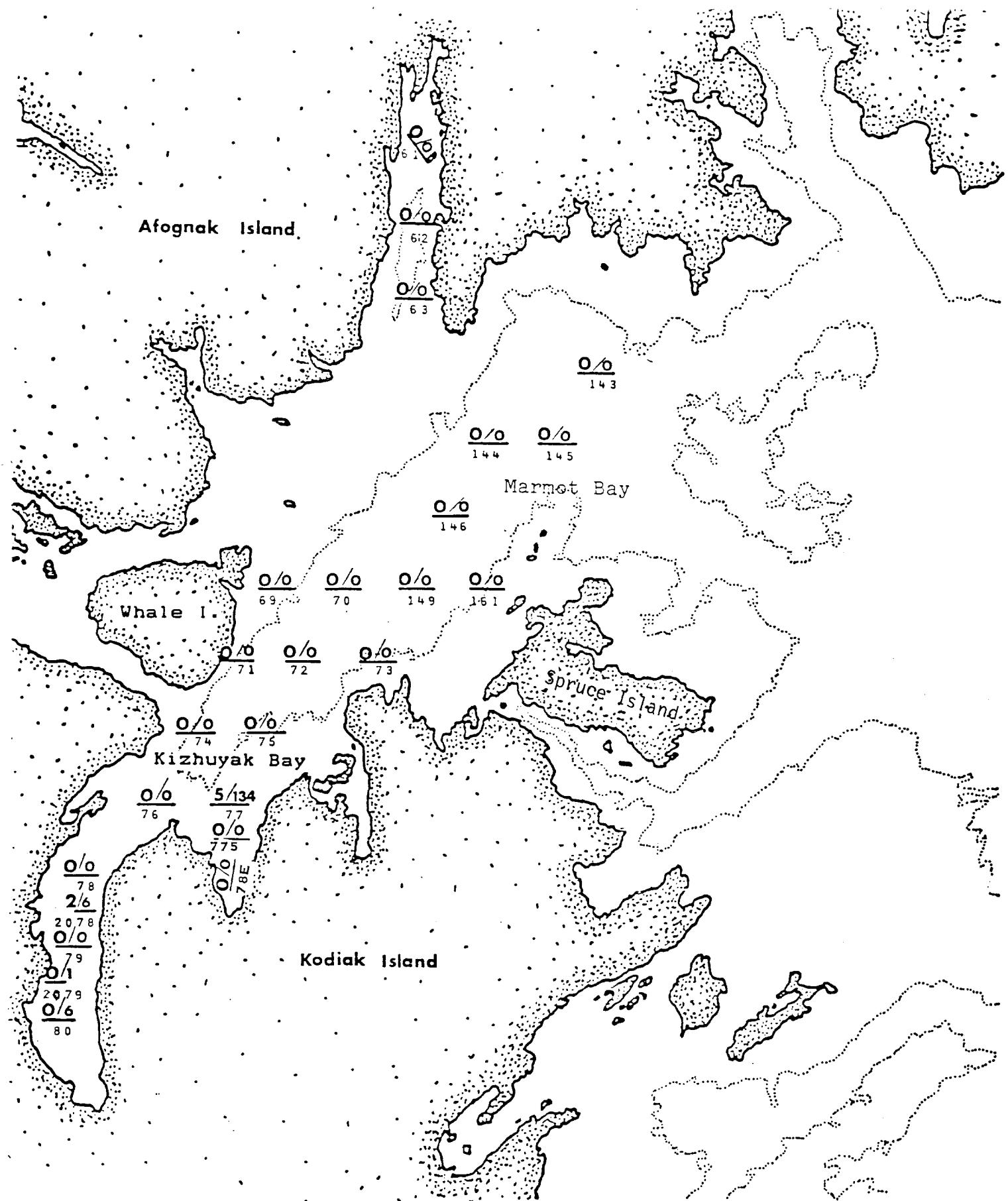


Figure 28L. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1984).

Presented as: Legal males/Adult females

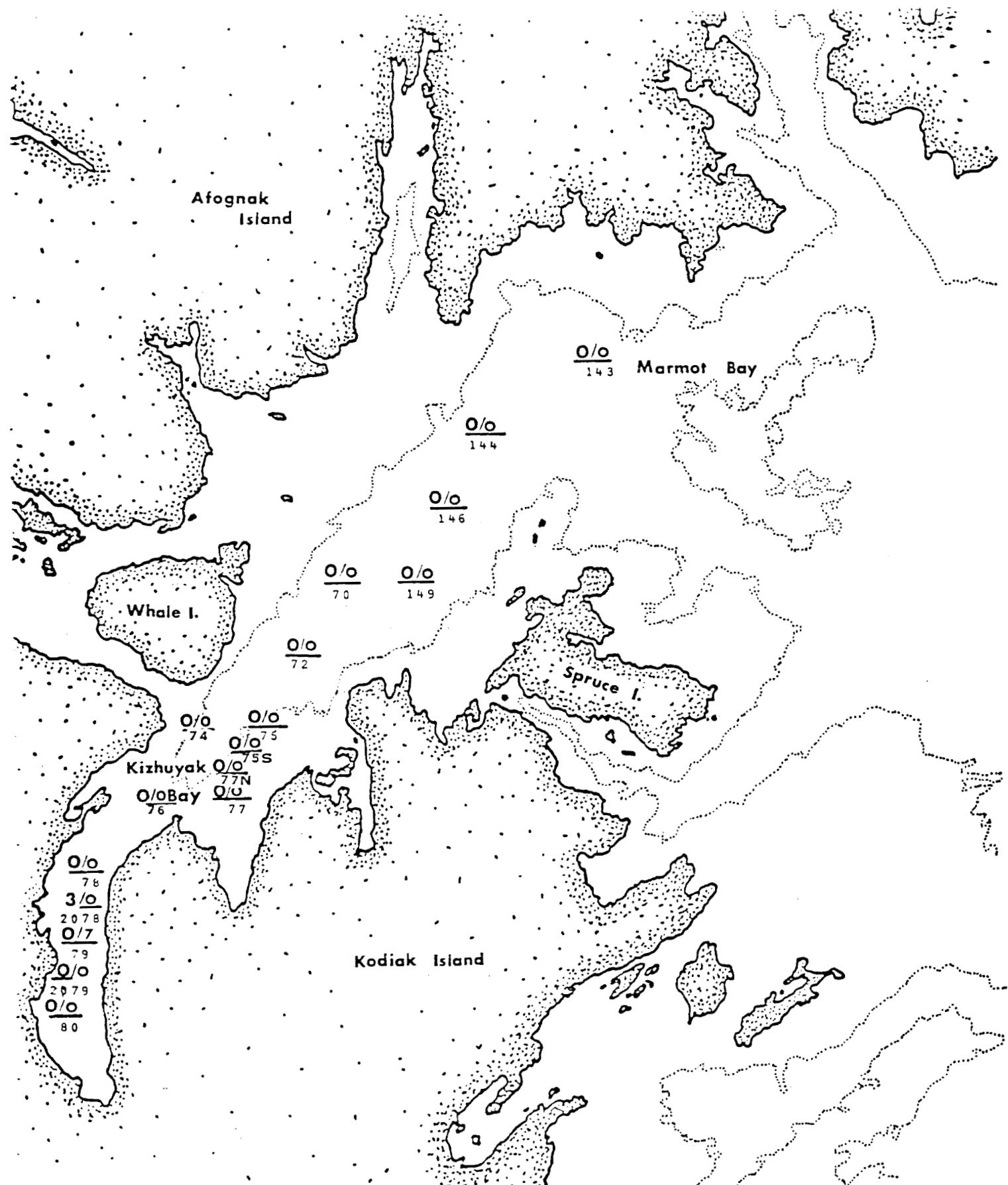


Figure 28m. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1985).

Presented as: Legal males/Adult females

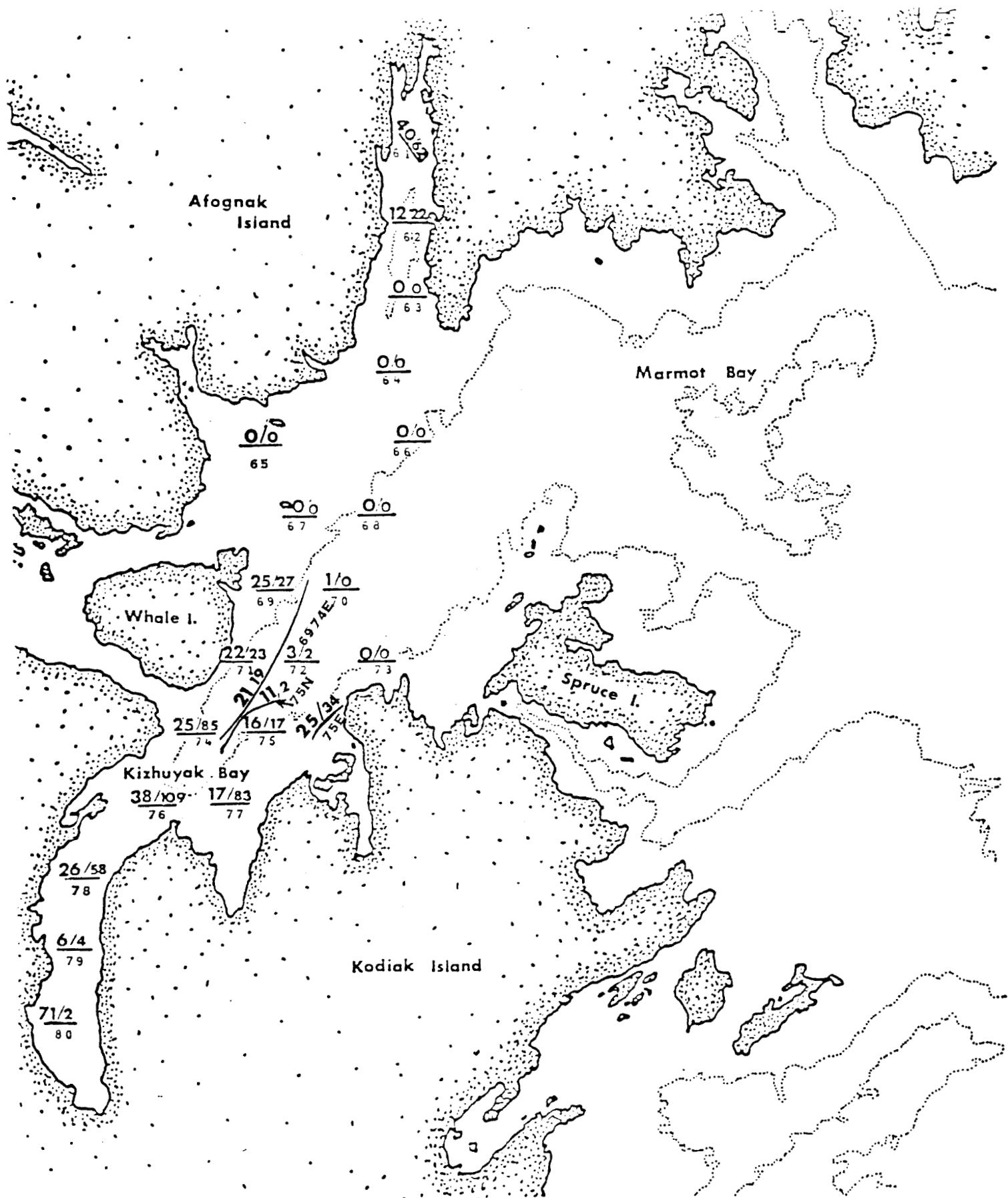


Figure 29a. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1972).

Presented as: 1's + 2's/3's + 4's

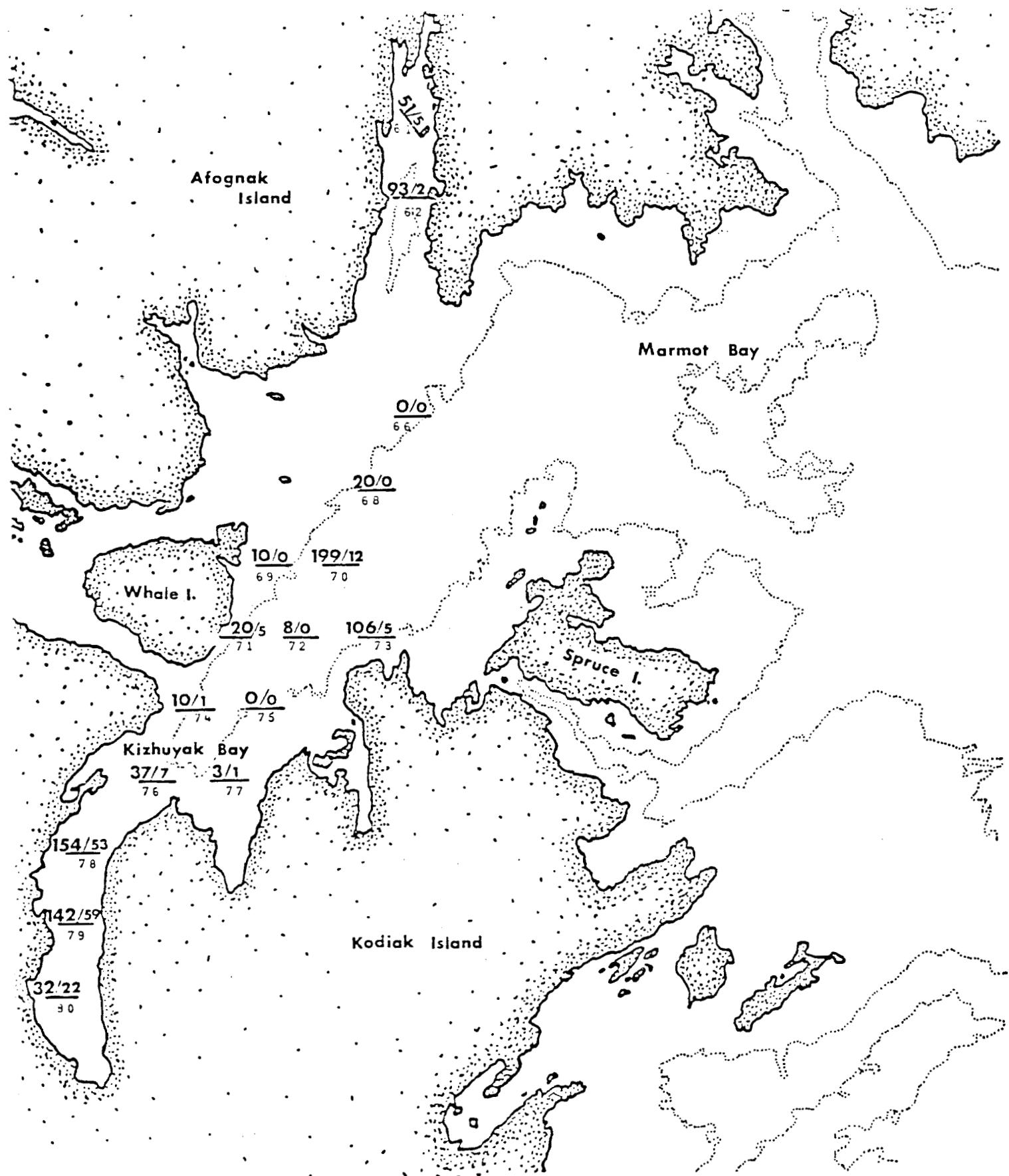


Figure 29b. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1973).

Presented as: 1's + 2's/3's + 4's

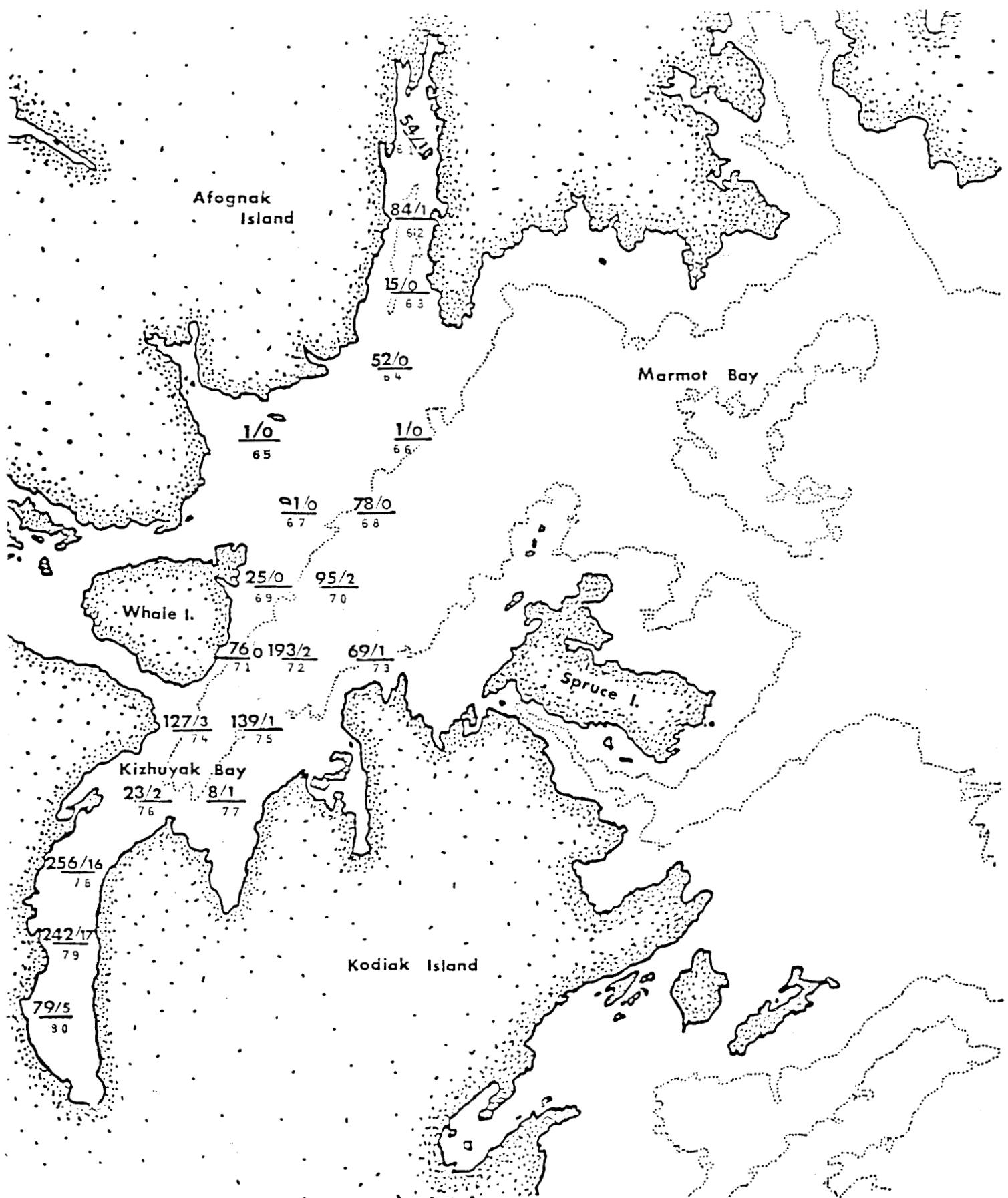


Figure 29c. Average standardized number of prae-recruit male king crab, *Paralithodes camtschatica*, captured per pot at Bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1974).

Presented as: 1's + 2's/3's + 4's

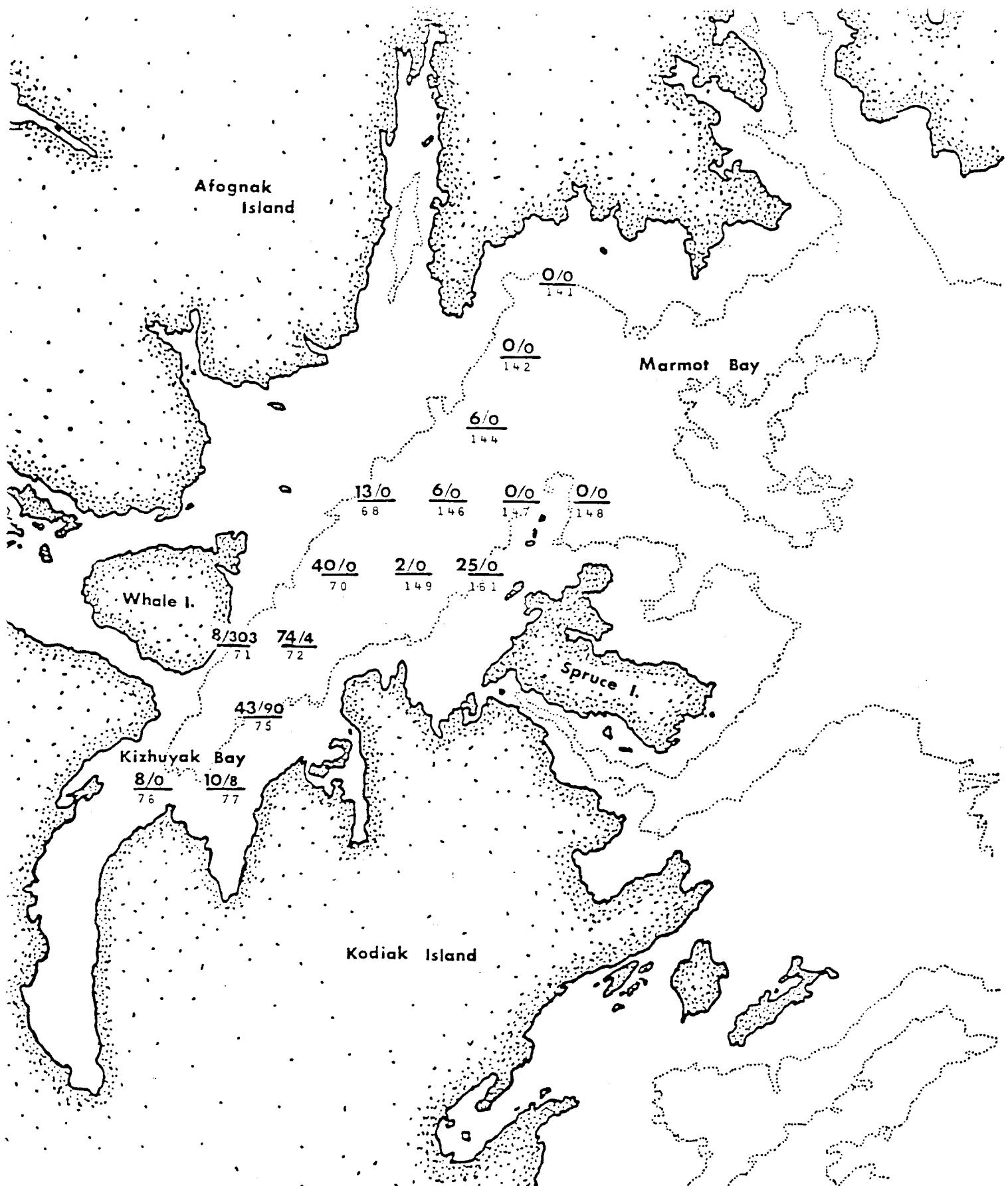


Figure 29d. Average standardized number of prae-recruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1975).

Presented as: 1's + 2's/3's + 4's

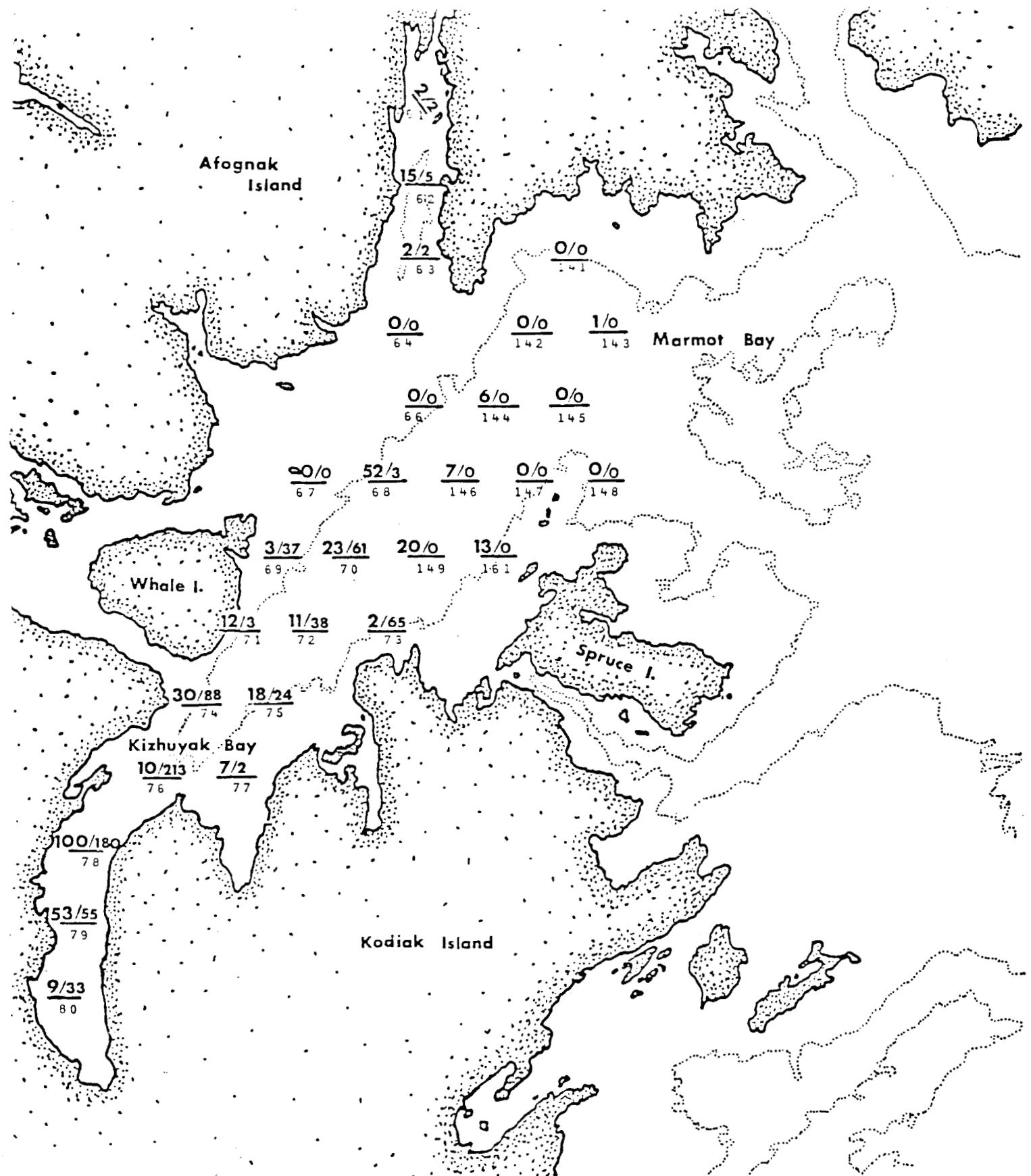


Figure 29e. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1976).

Presented as: 1's + 2's/3's + 4's

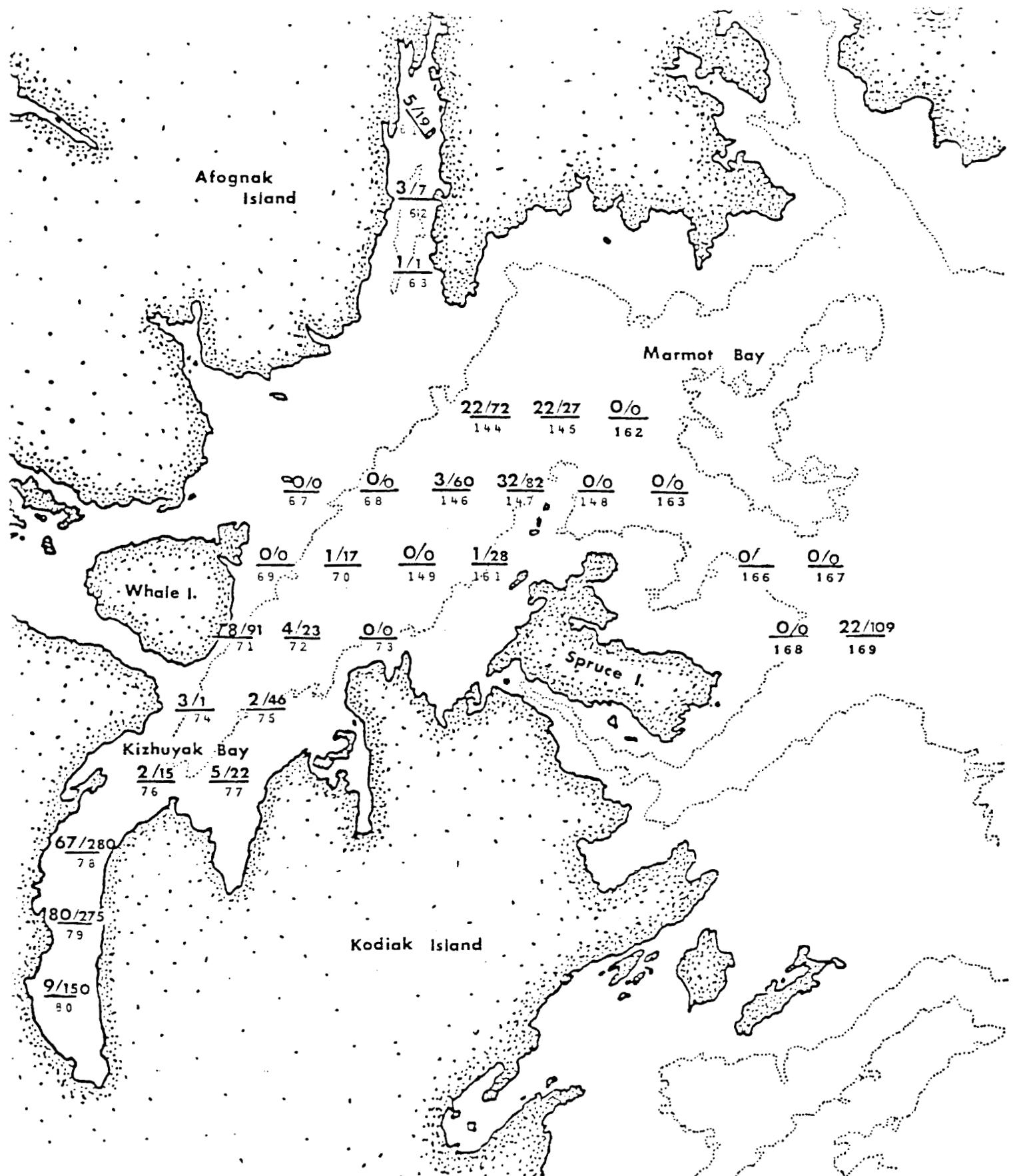


Figure 29f. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1977).

Presented as: 1's + 2's/3's + 4's

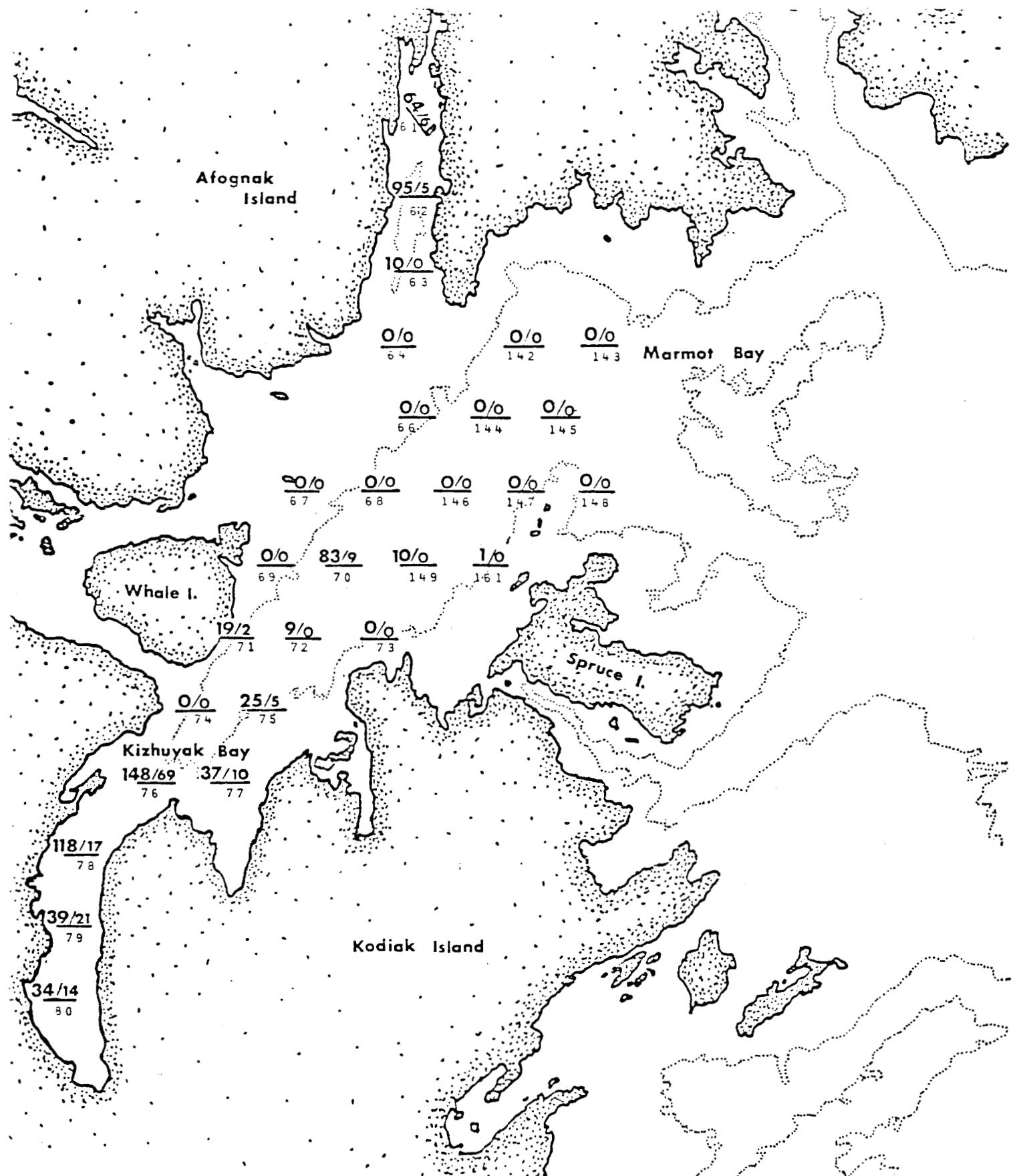


Figure 29g. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Isalnd (1979).

Presented as: 1's + 2's/3's + 4's

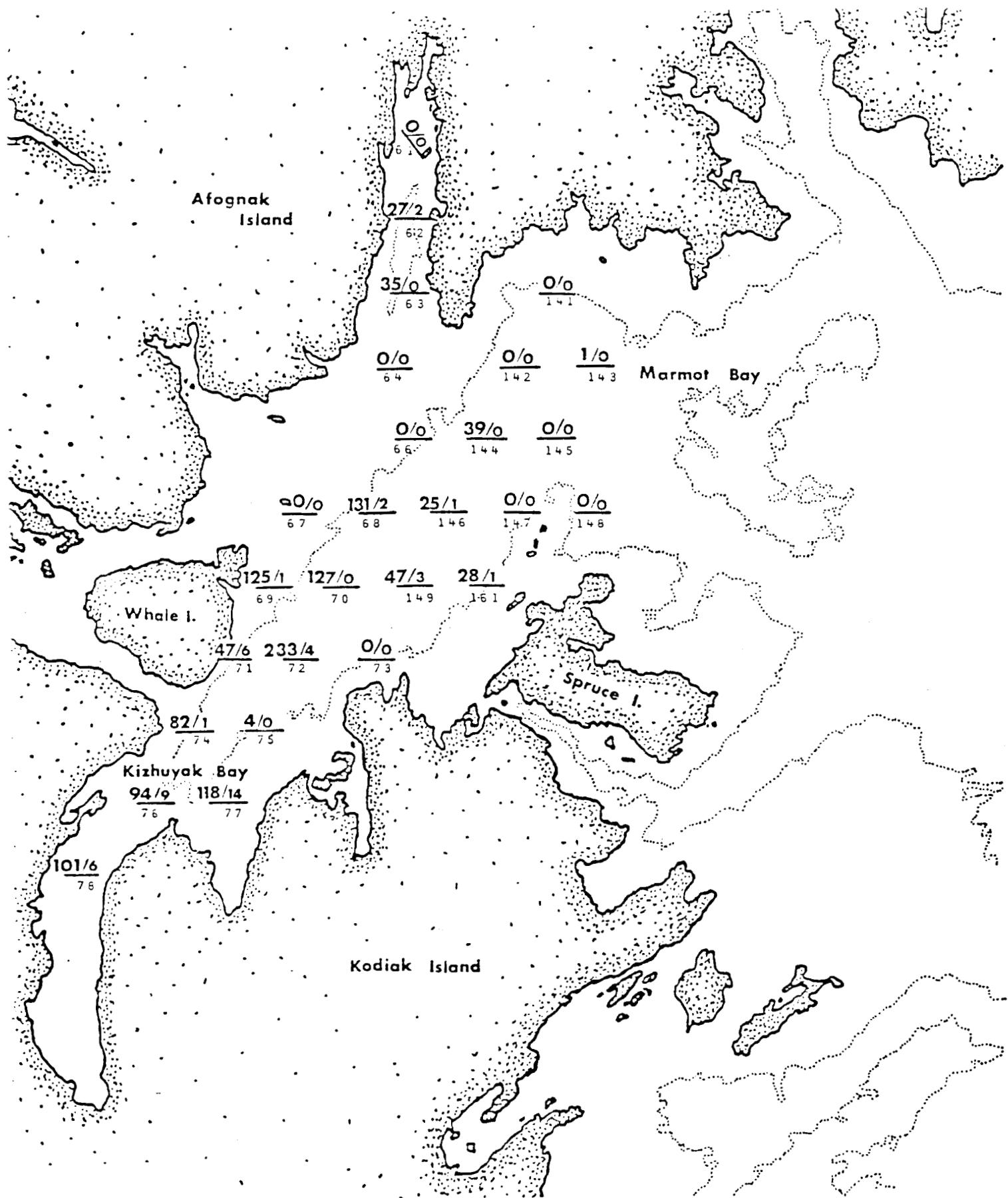


Figure 29h. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1980).

Presented as: 1's + 2's/3's + 4's

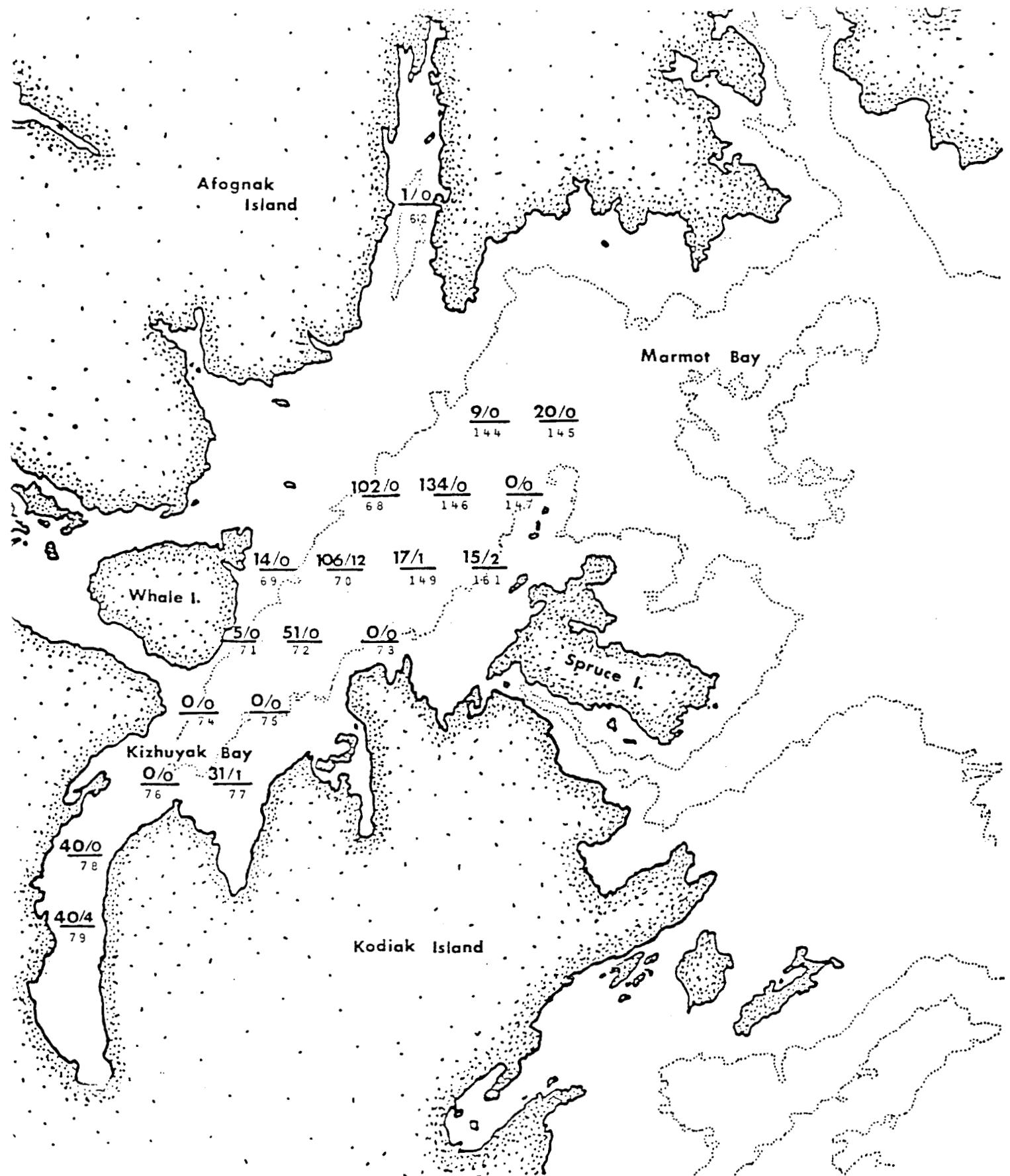


Figure 29i. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1981).

Presented as: 1's + 2's/3's + 4's

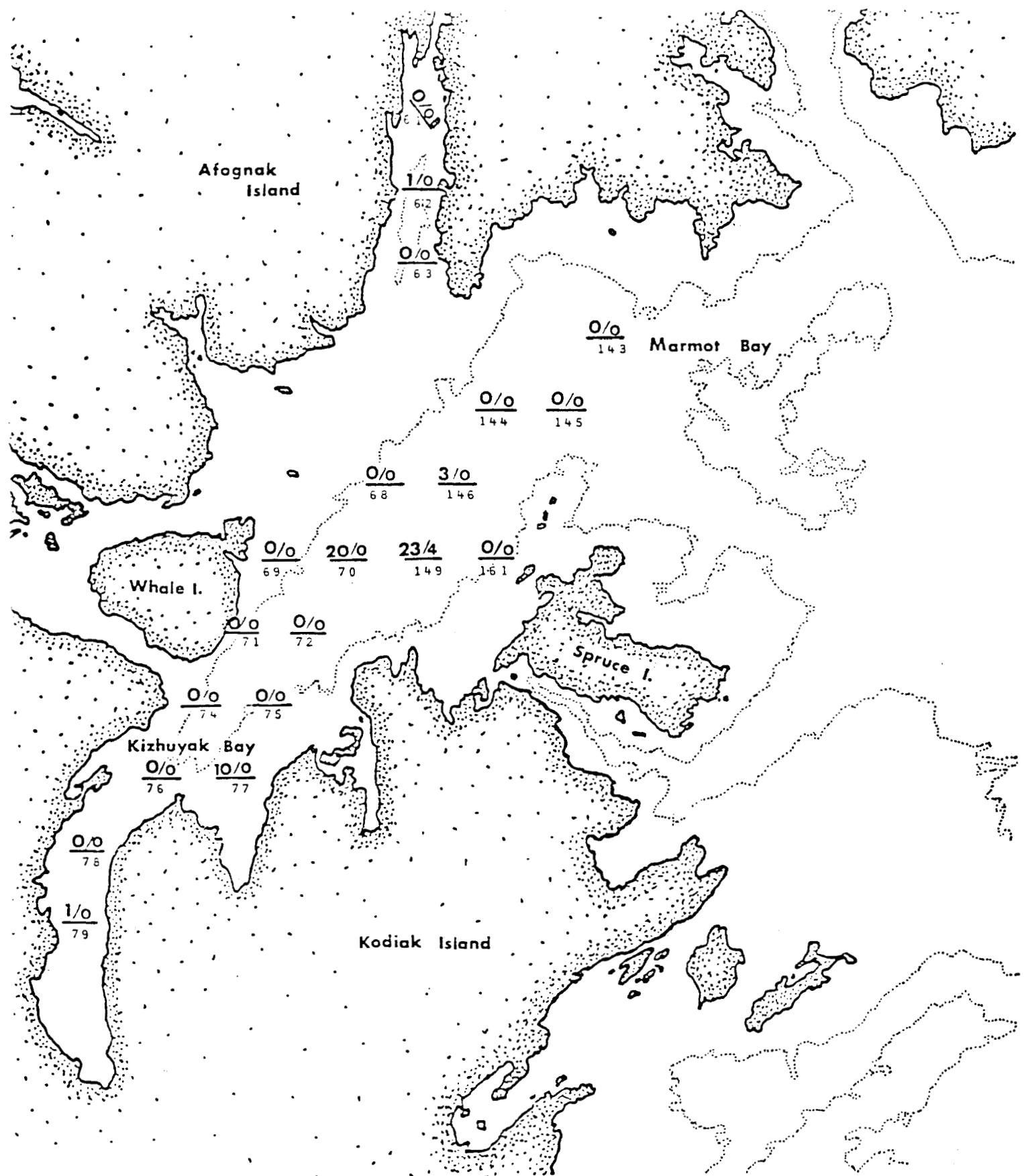


Figure 29j. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1982).

Presented as: 1's + 2's/3's + 4's

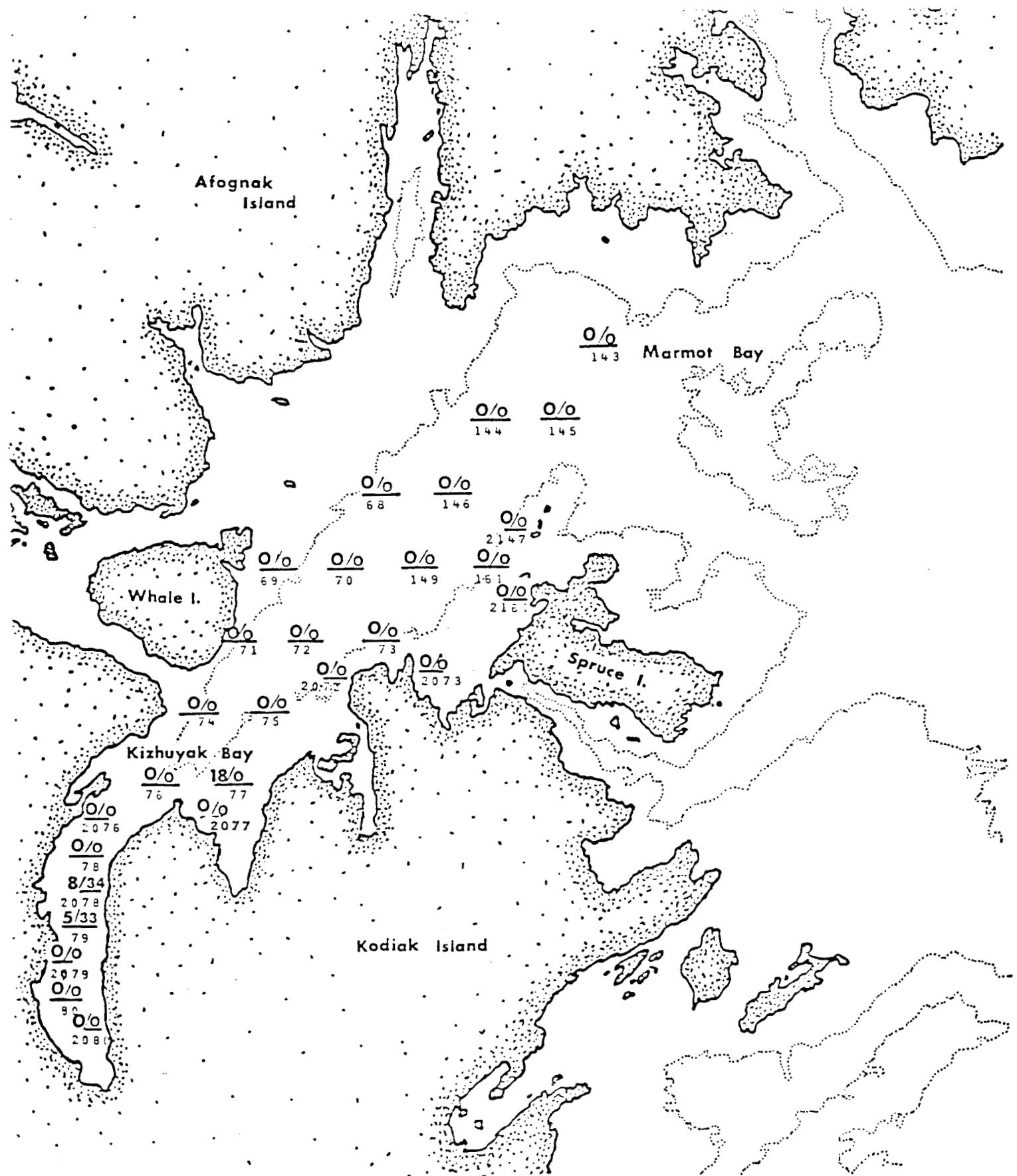


Figure 29k. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1983).

Presented as: 1's + 2's/3's + 4's

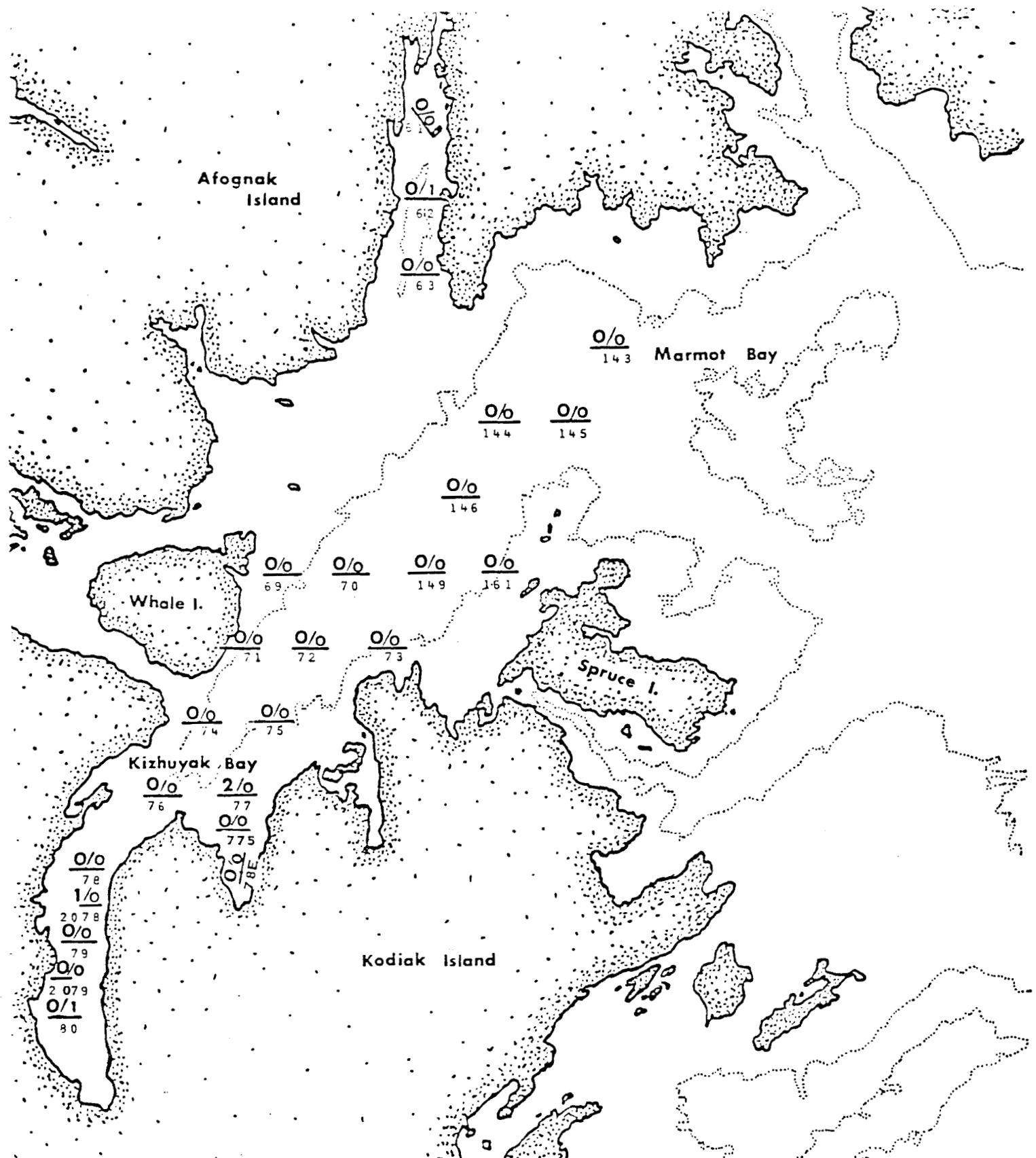


Figure 29L. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1984).

Presented as: 1's + 2's/3's + 4's

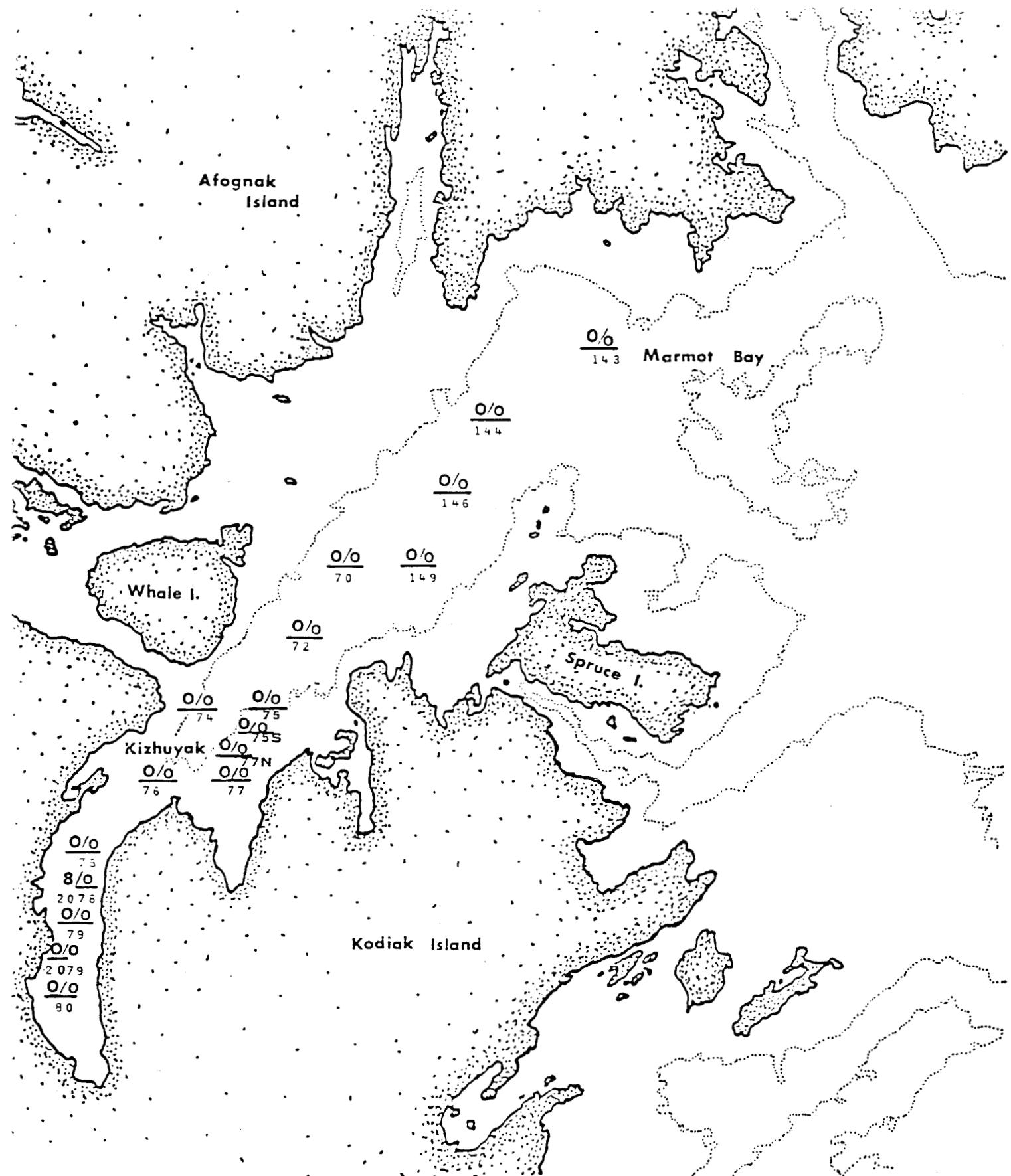


Figure 29m. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1985).

Presented as: 1's + 2's/3's + 4's

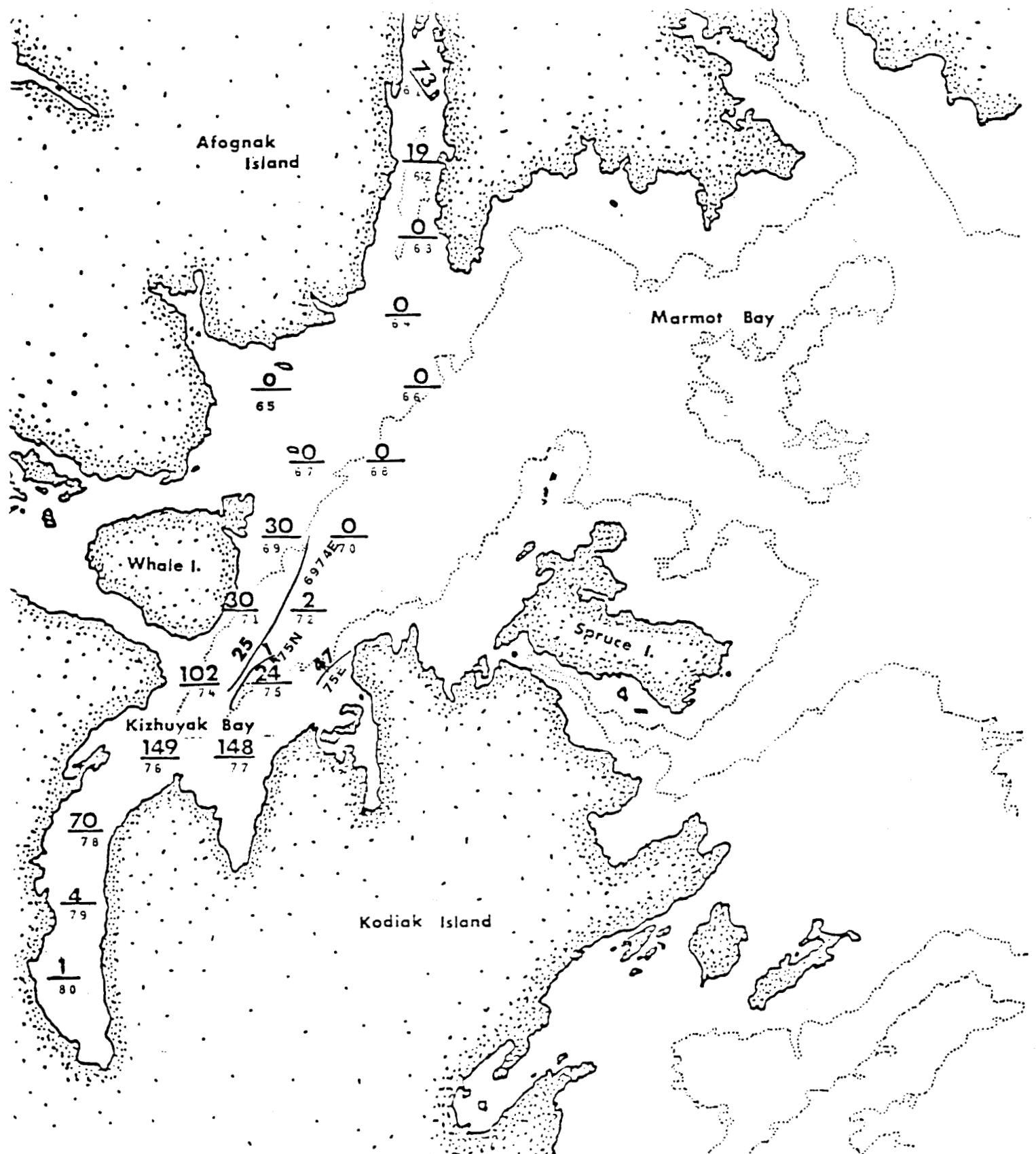


Figure 30a. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1972).

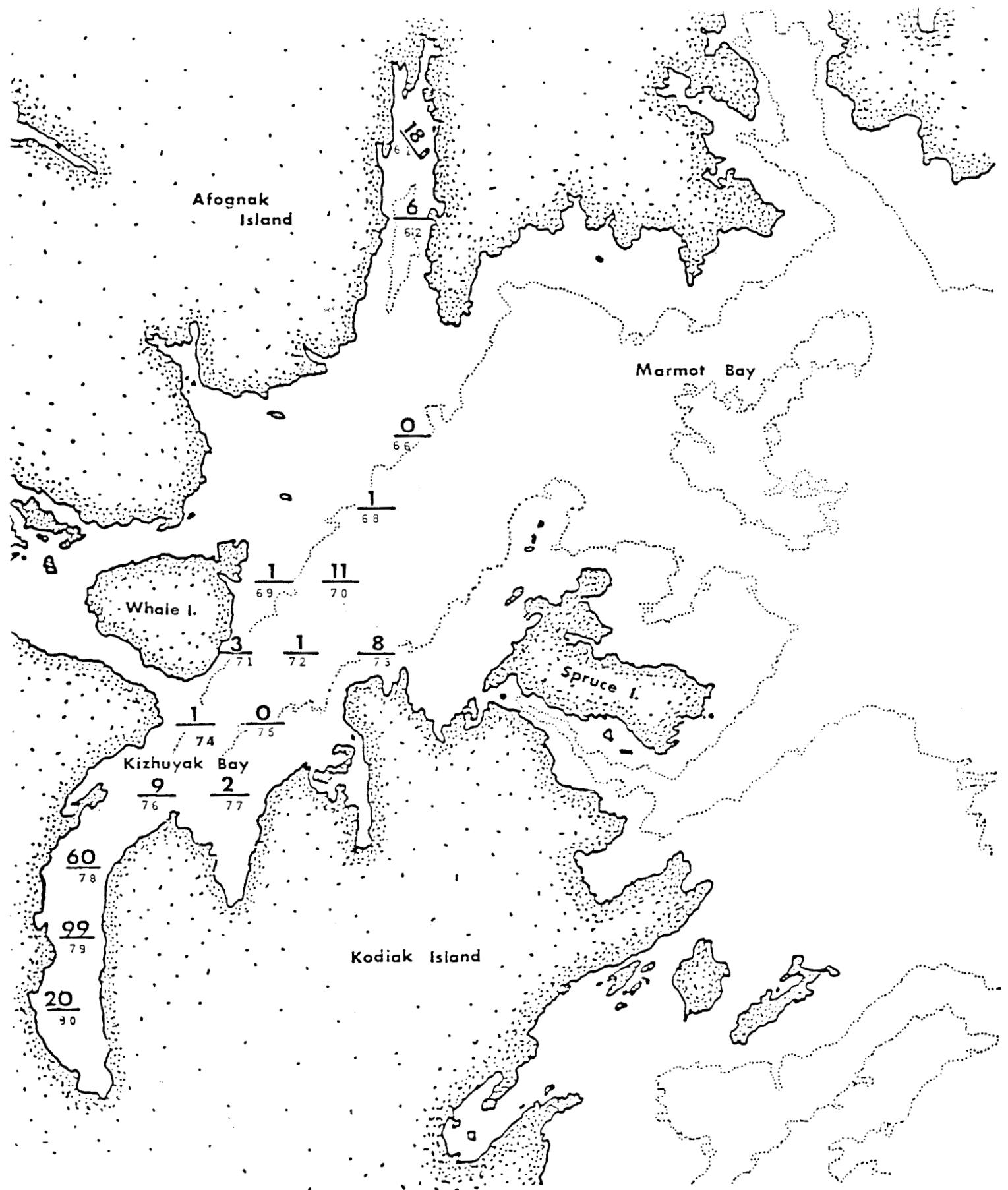


Figure 30b. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1973).

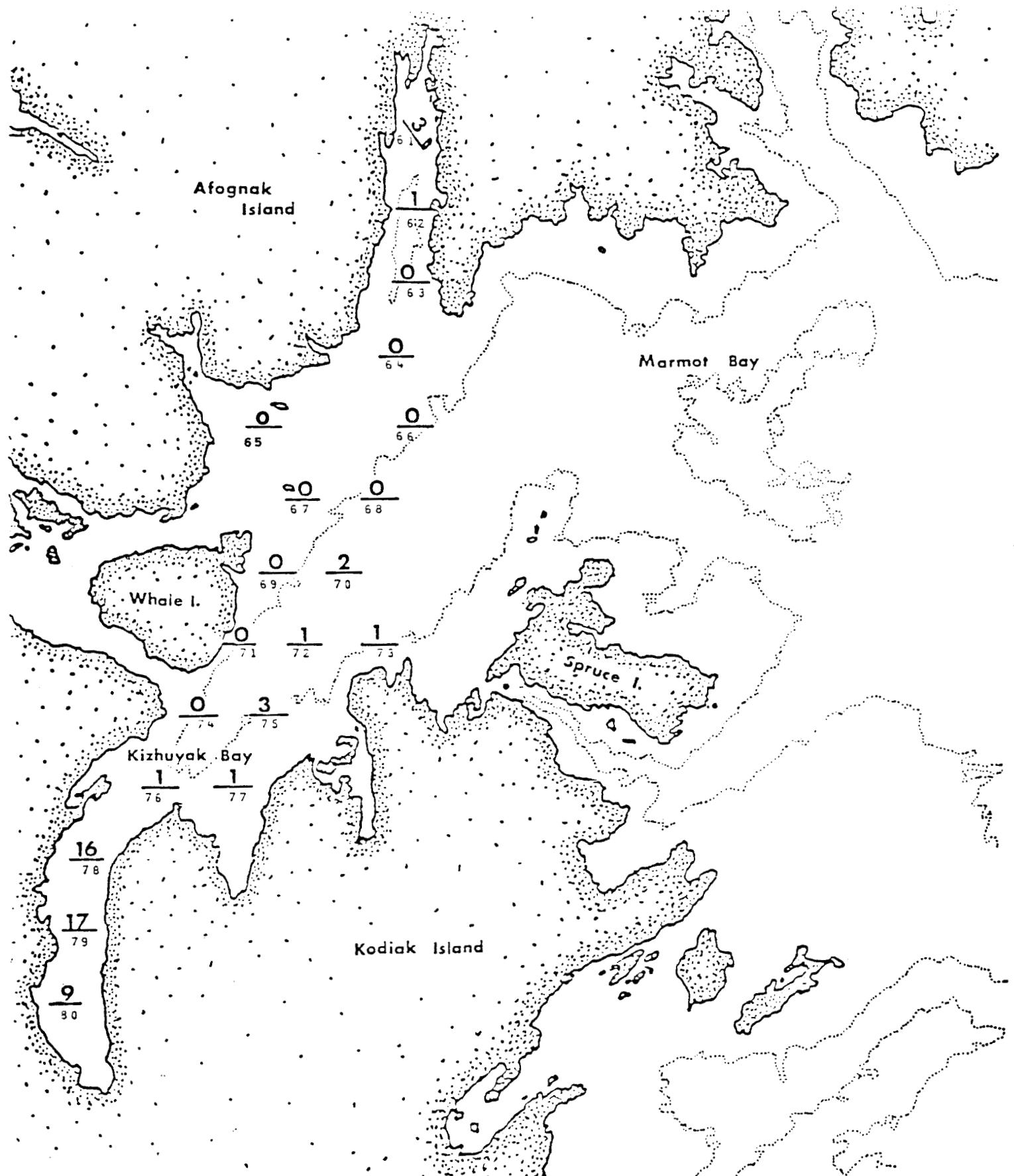


Figure 30c. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1974).

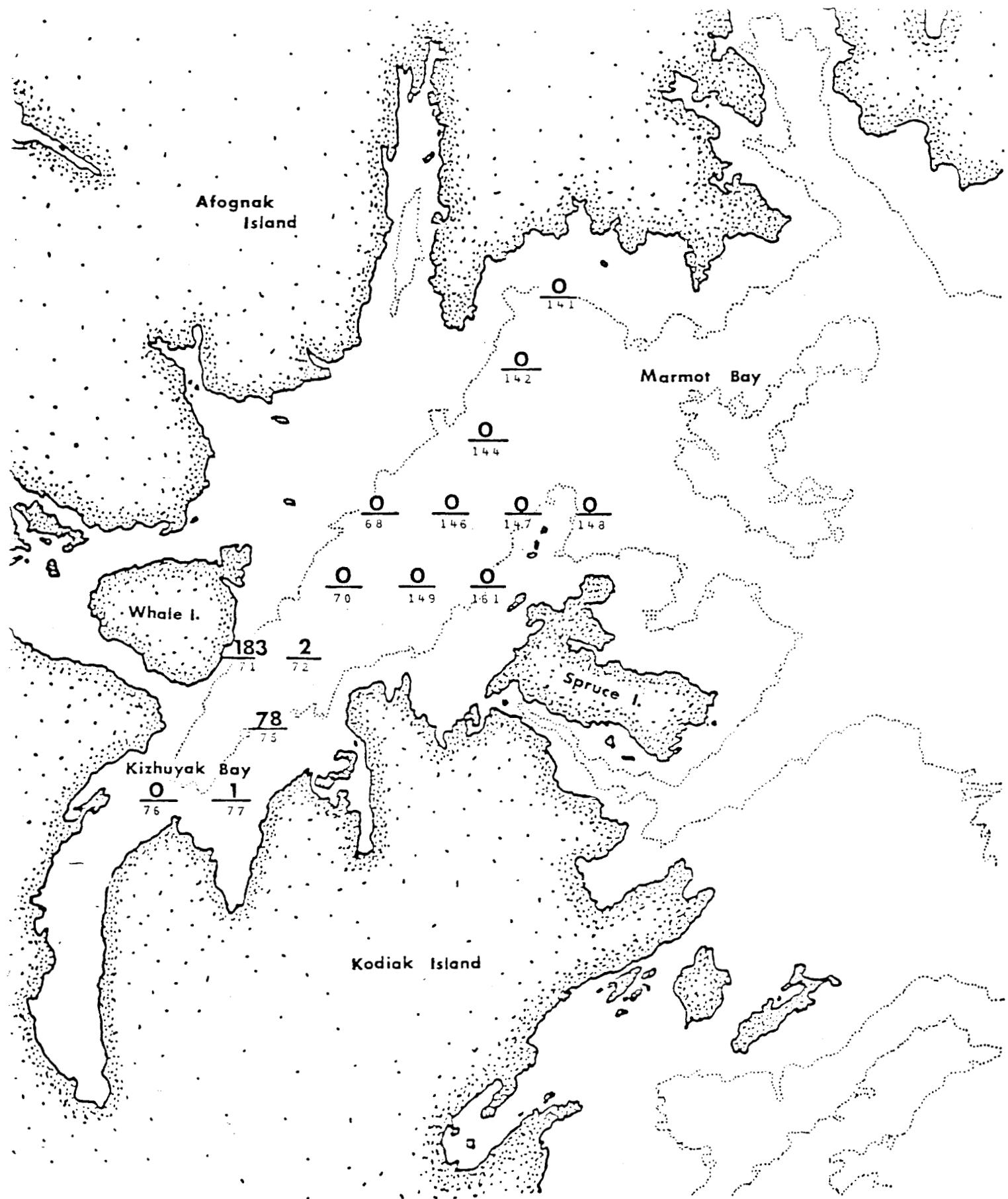


Figure 30d. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1975).

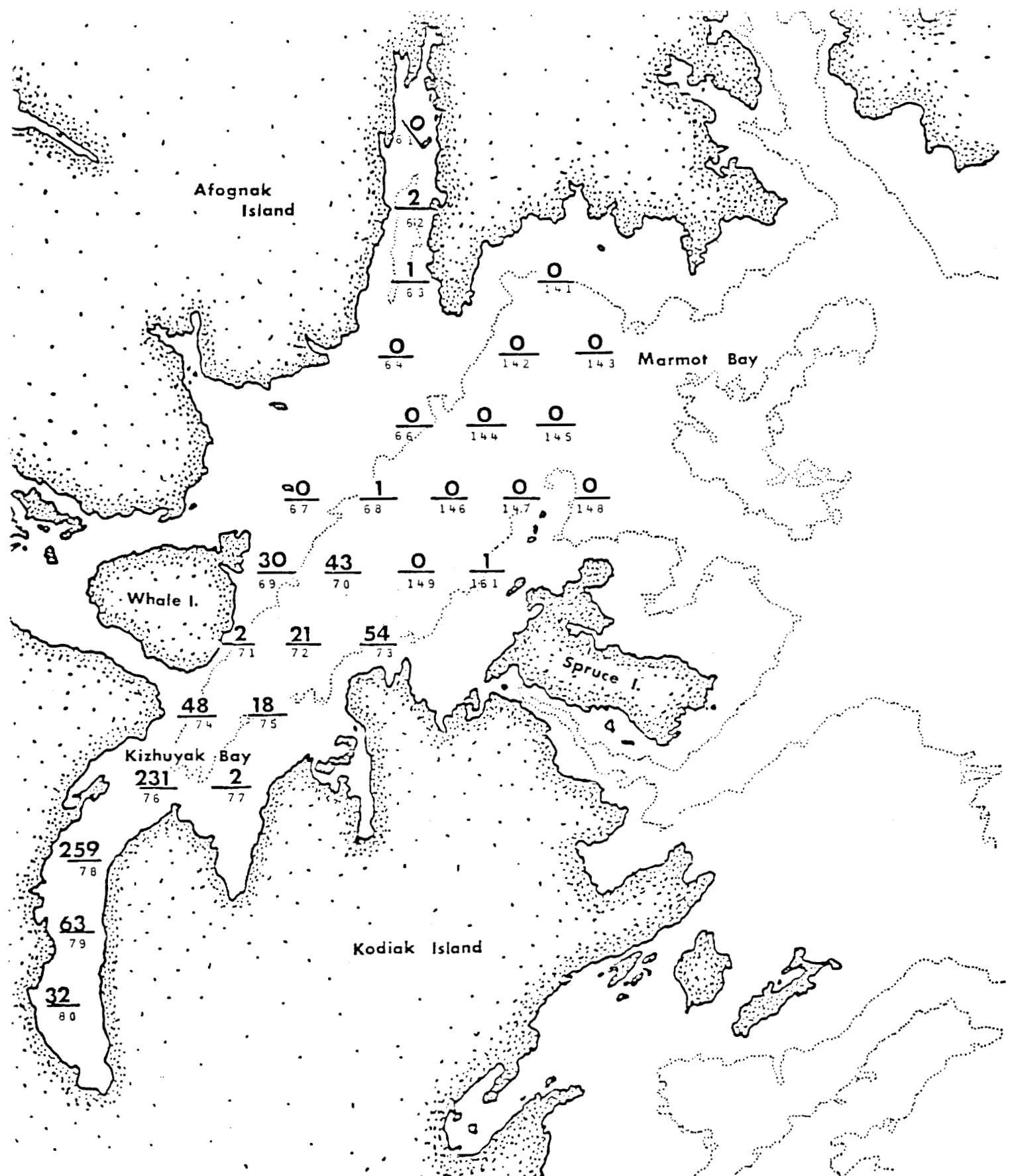


Figure 30e. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1976).

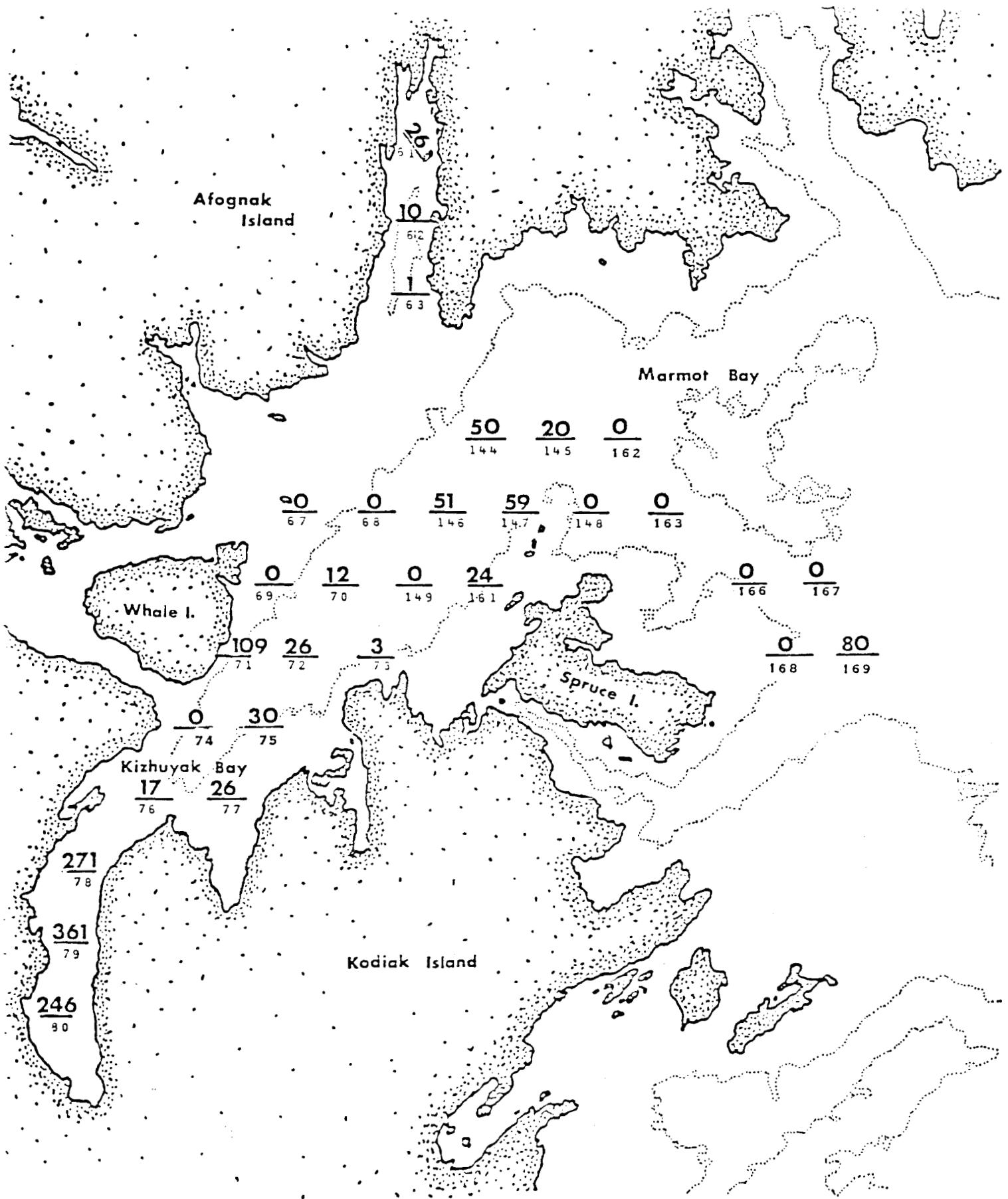


Figure 30f. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1977).

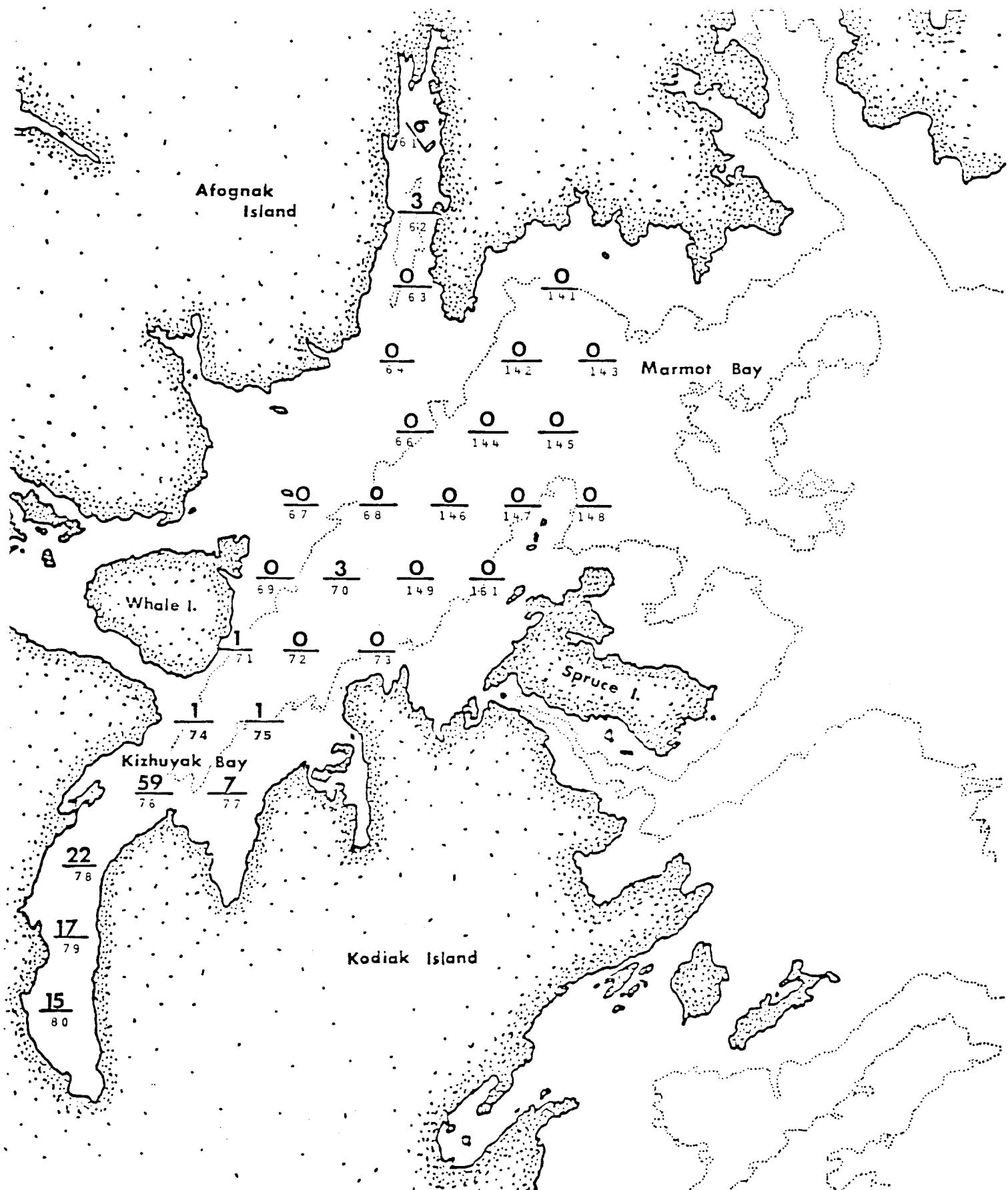


Figure 30g. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1979).

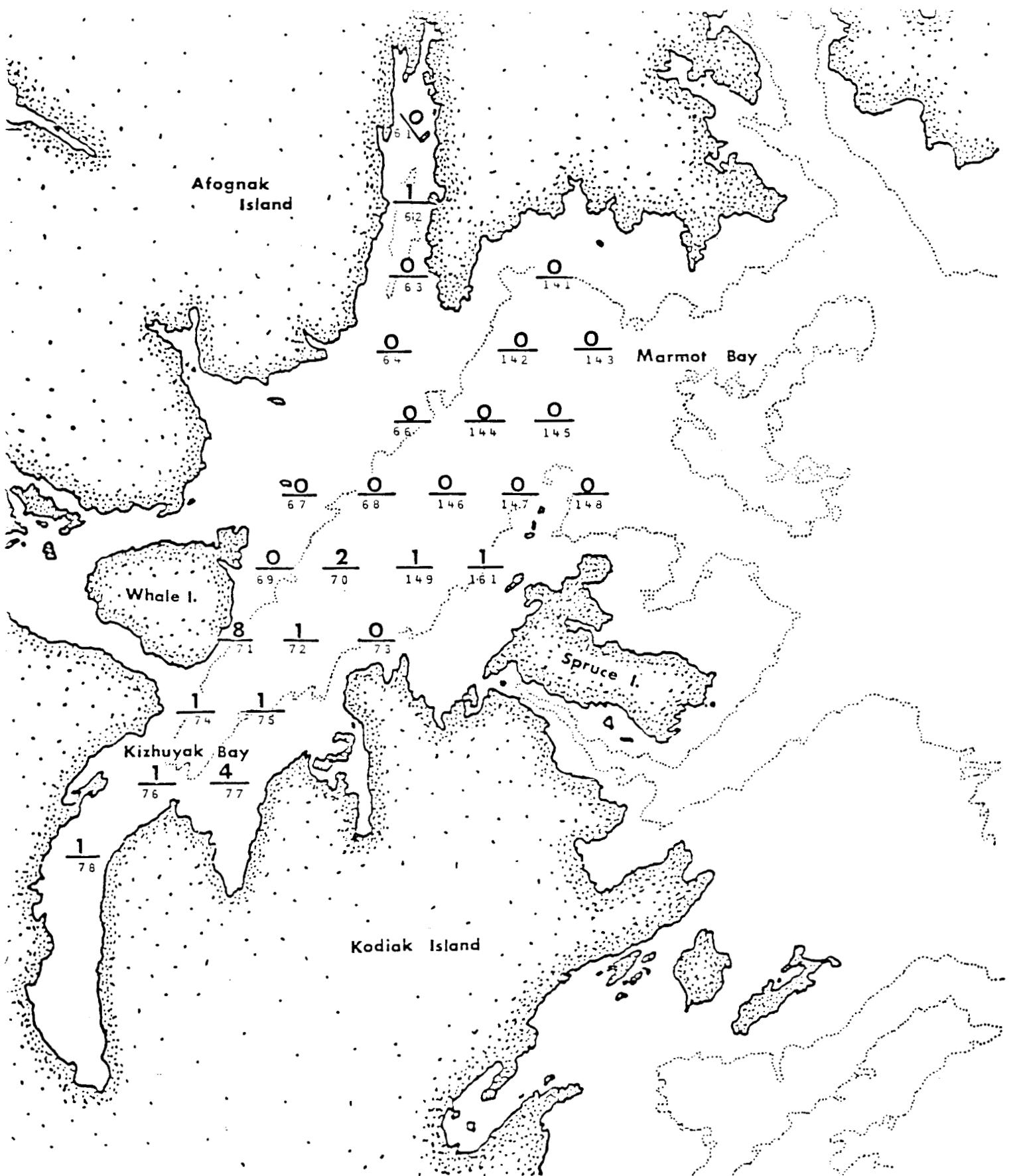


Figure 30h. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1980).

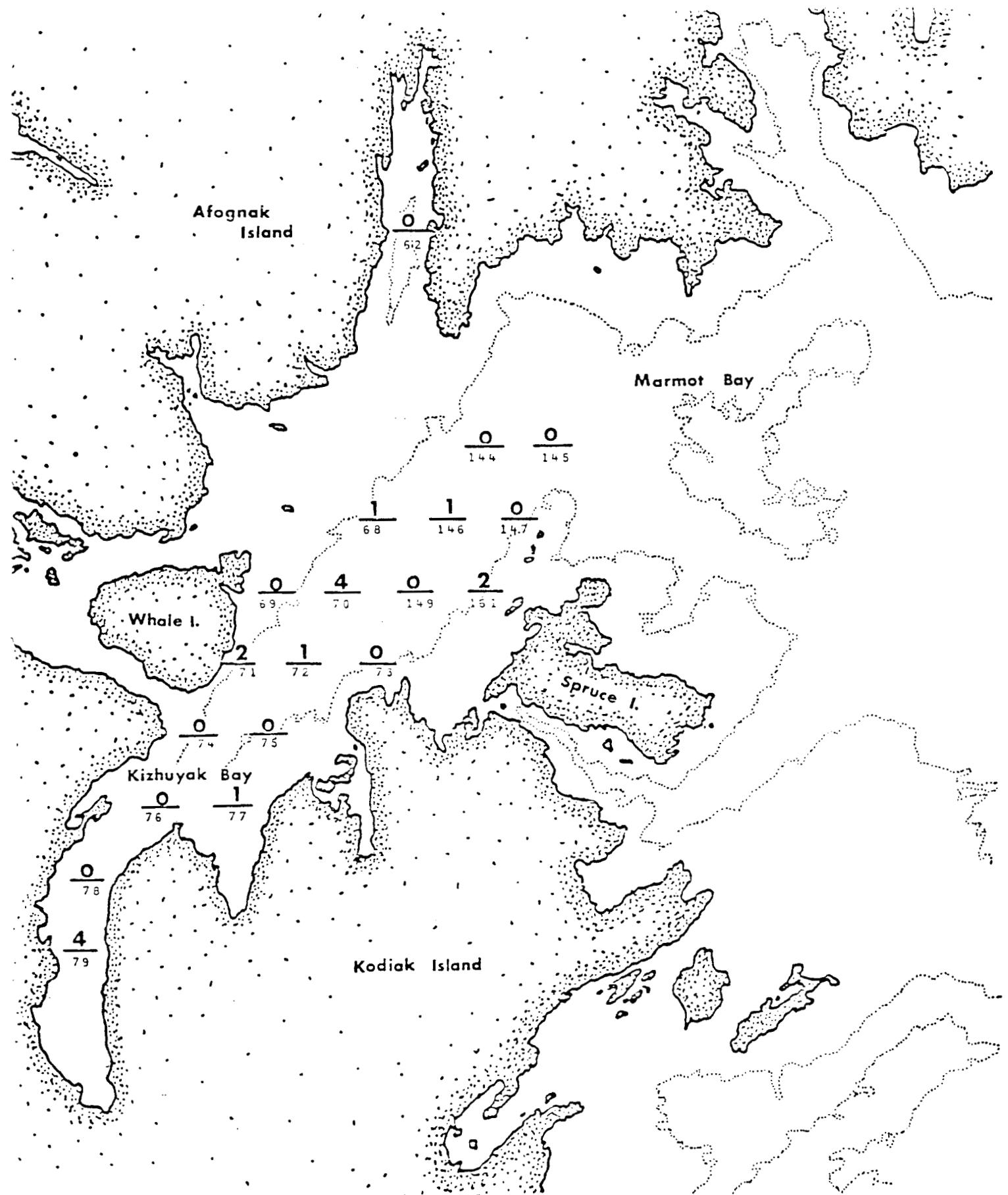


Figure 30i. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1981).

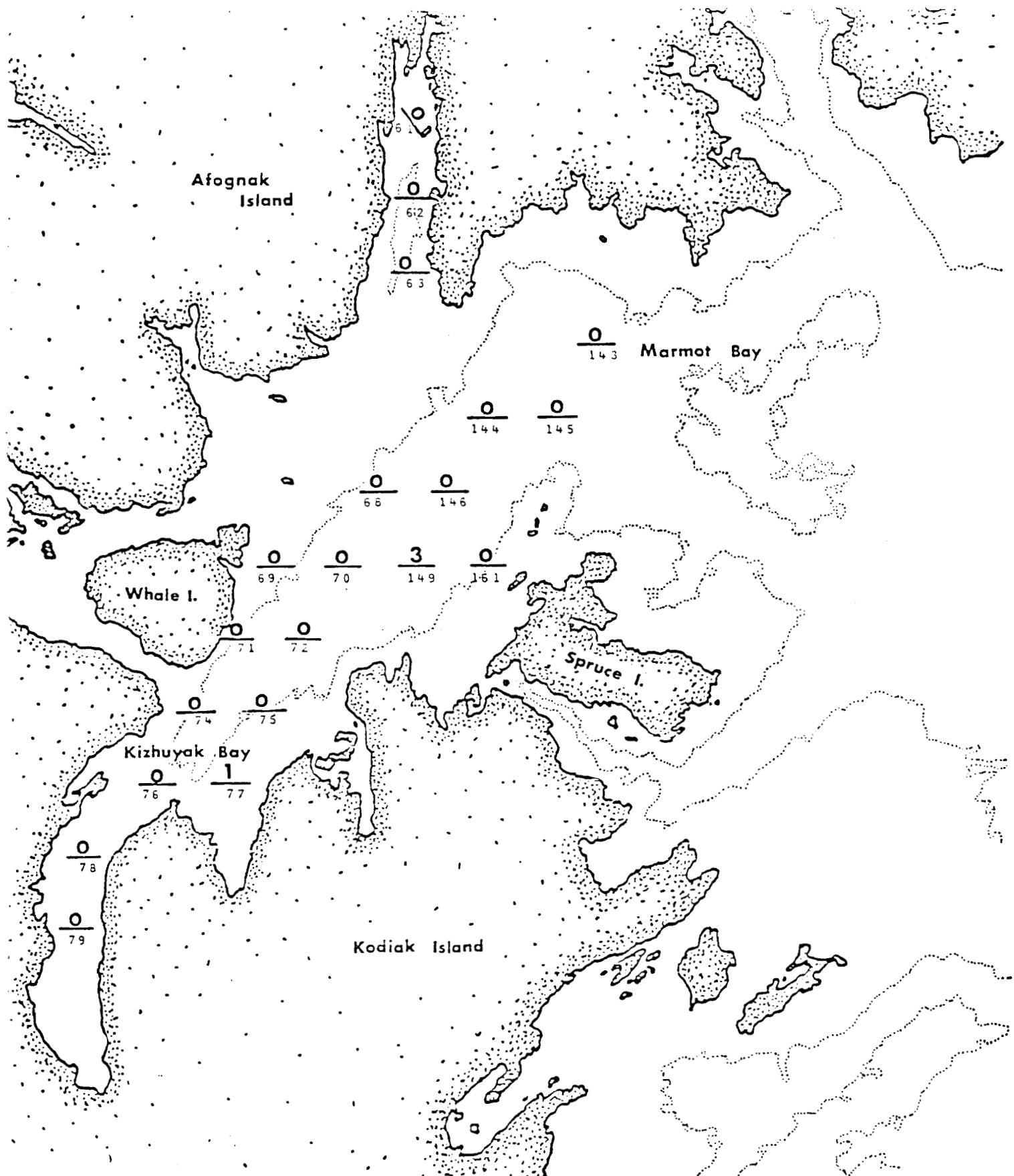


Figure 30j. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1982).

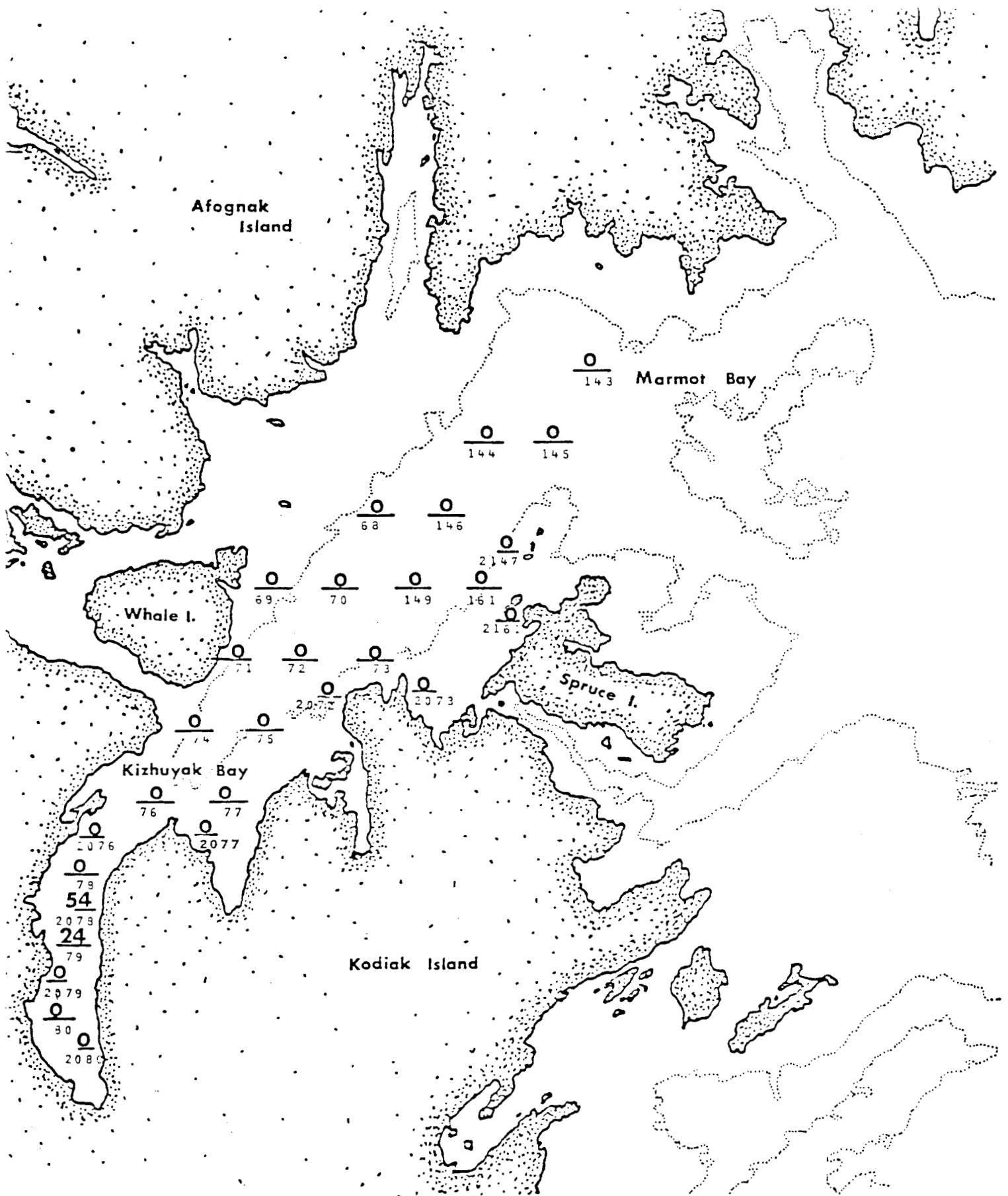


Figure 30k. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1983).

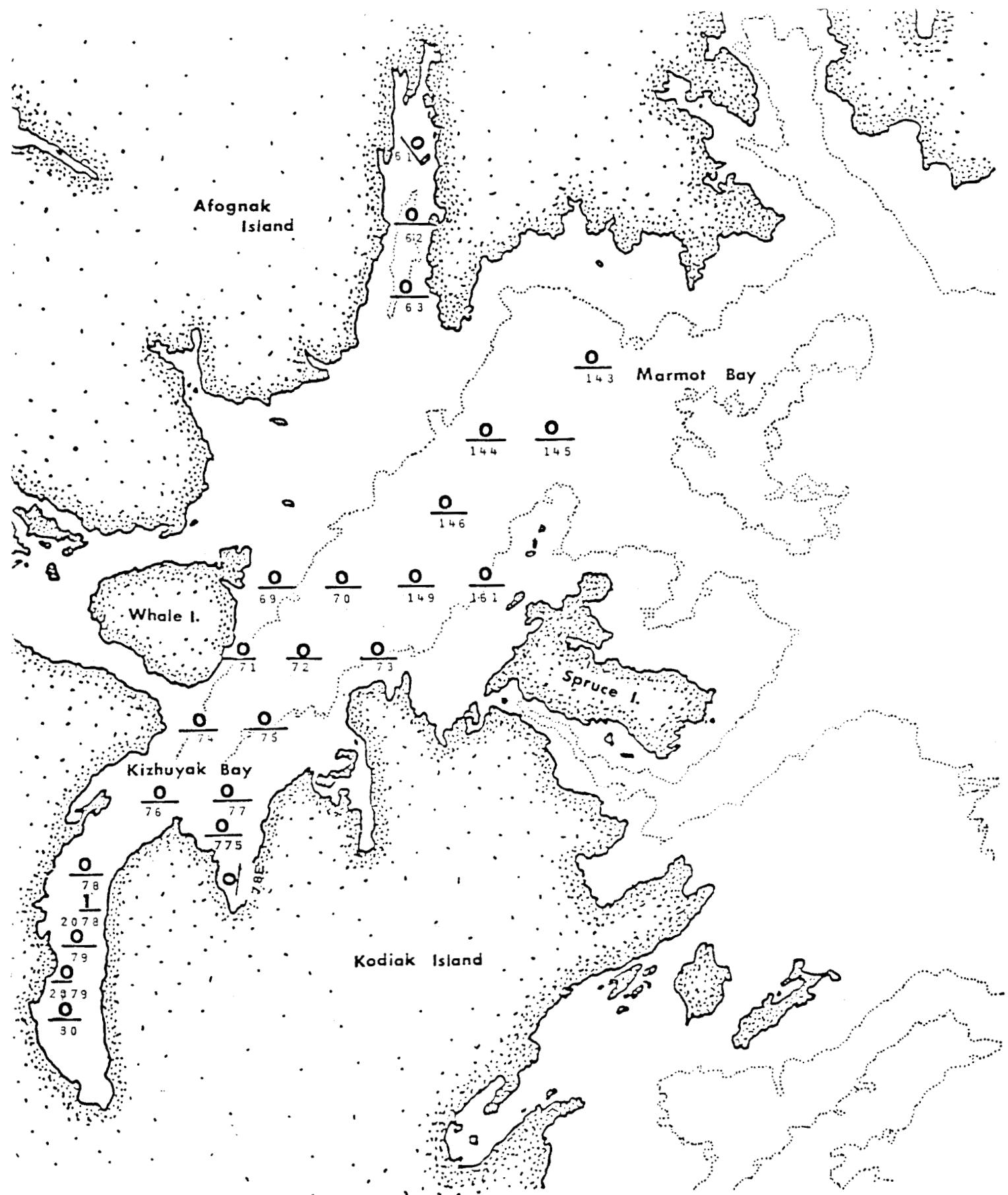


Figure 30L. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1984).

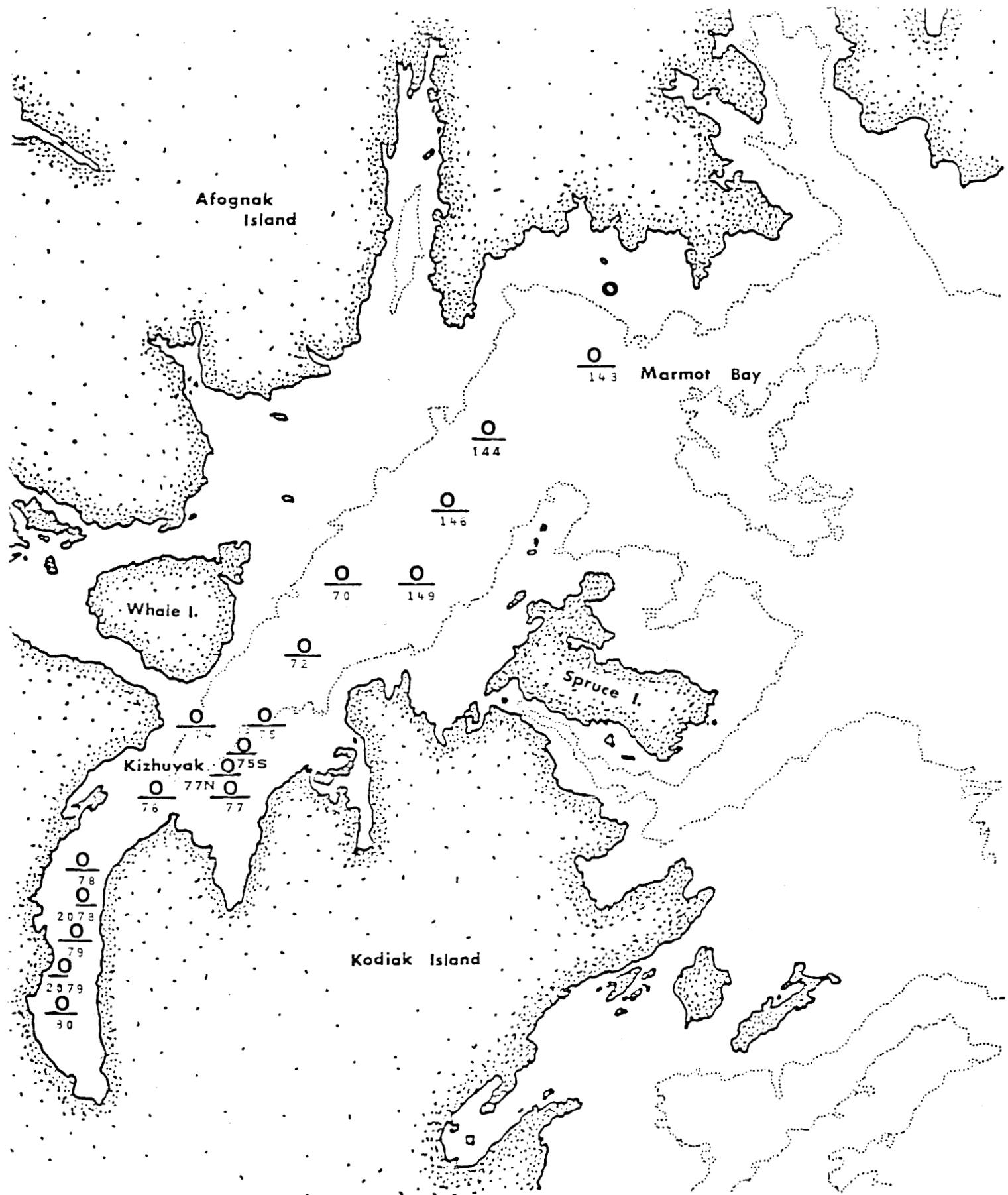


Figure 30m. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Marmot and Kizhuyak Bays, Kodiak Island (1985).

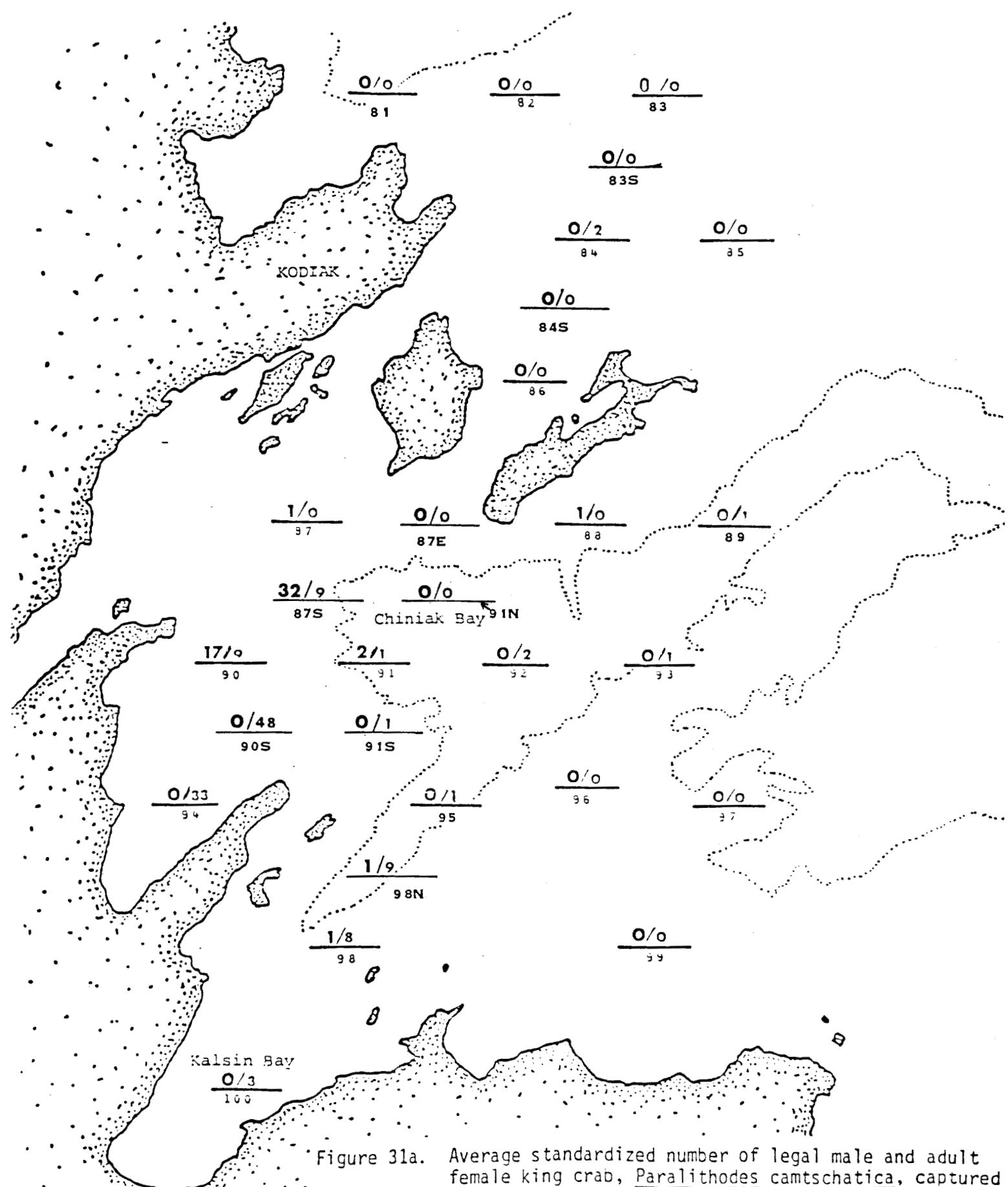


Figure 31a. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1972).

Presented as: Legal males/Adult females

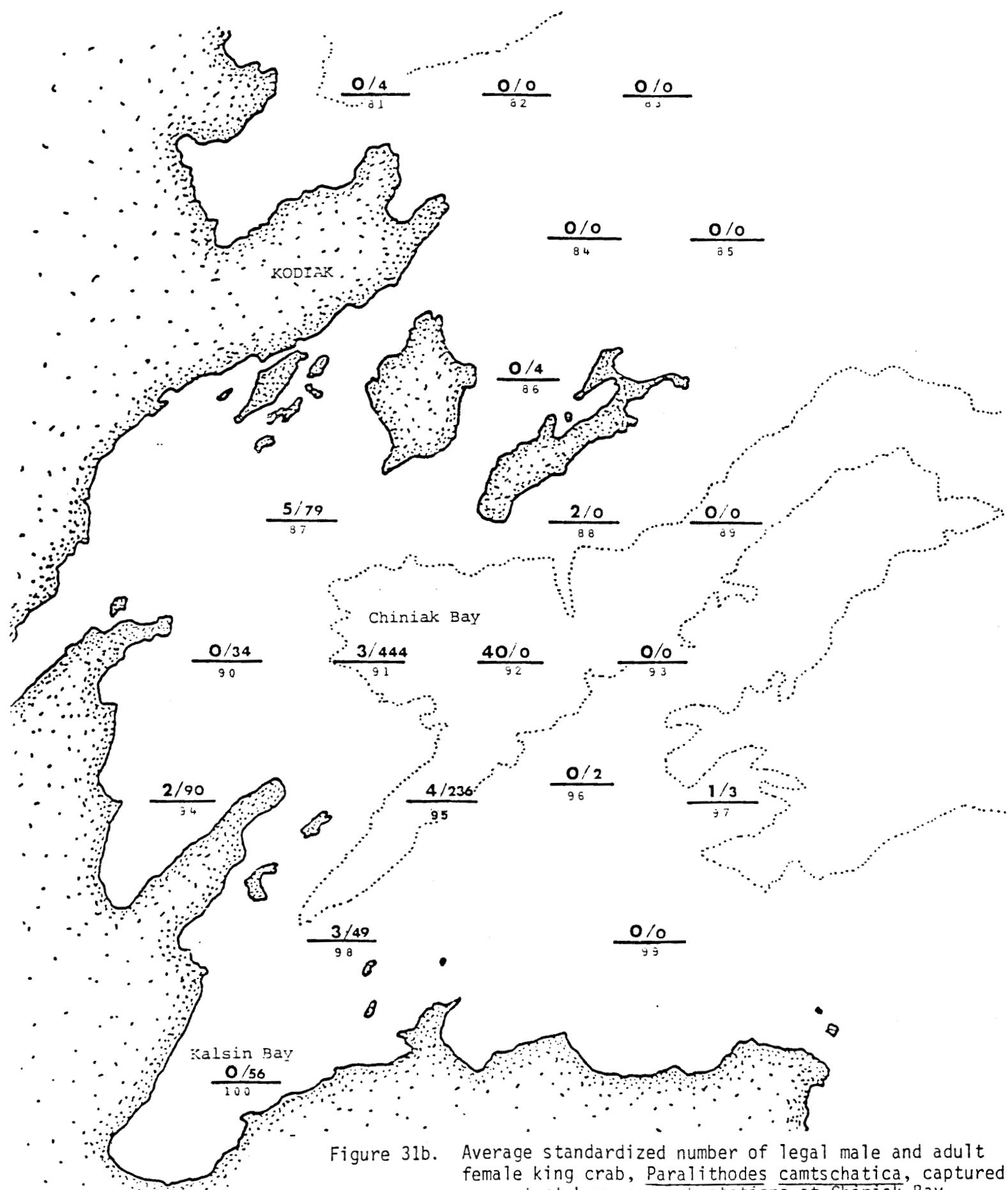


Figure 31b. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1973).

Presented as: Legal males/Adult females  
-258-

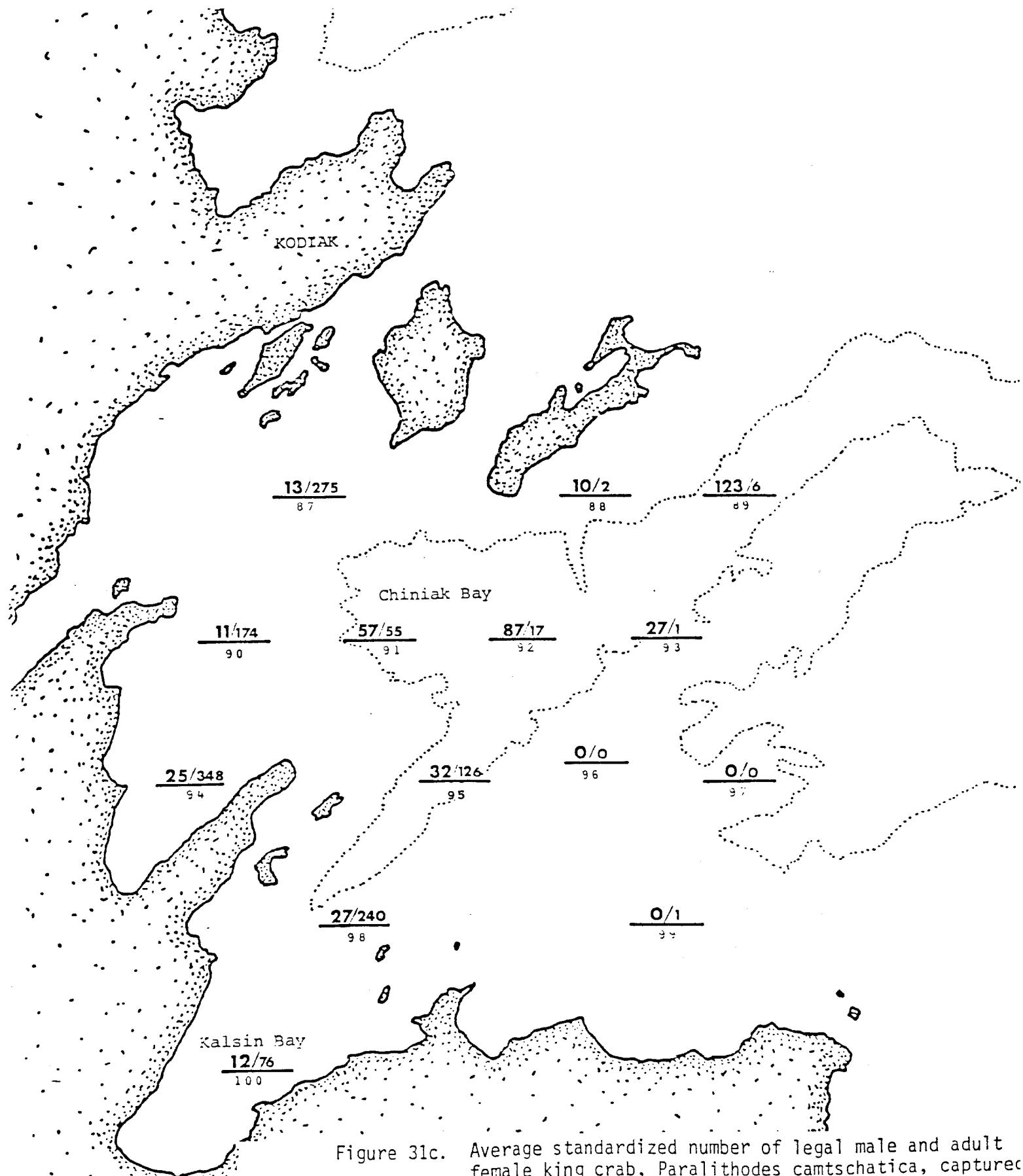


Figure 31c. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1974).

Presented as: Legal males/Adult females

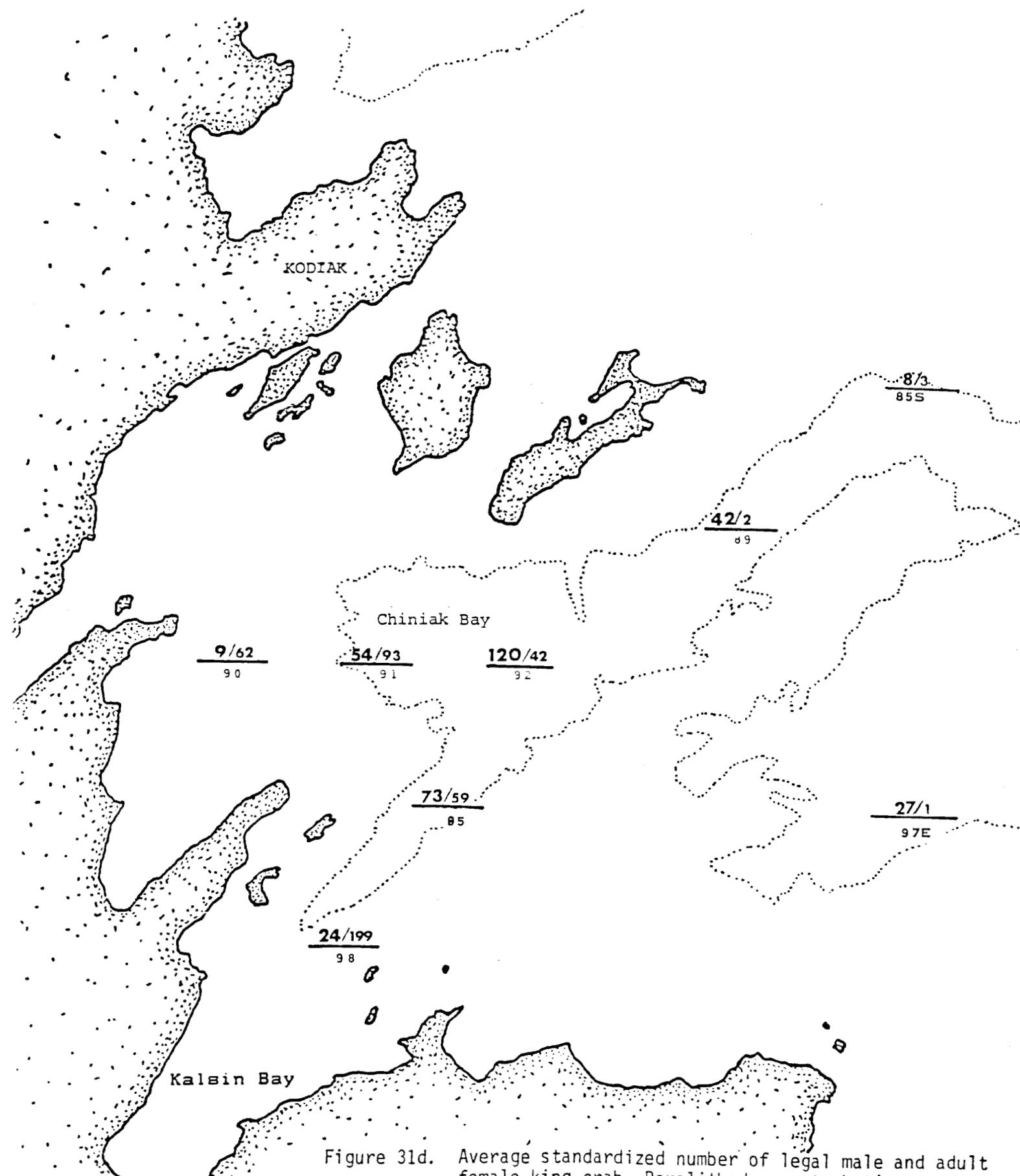


Figure 31d. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1975).

Presented as: Legal males/Adult females

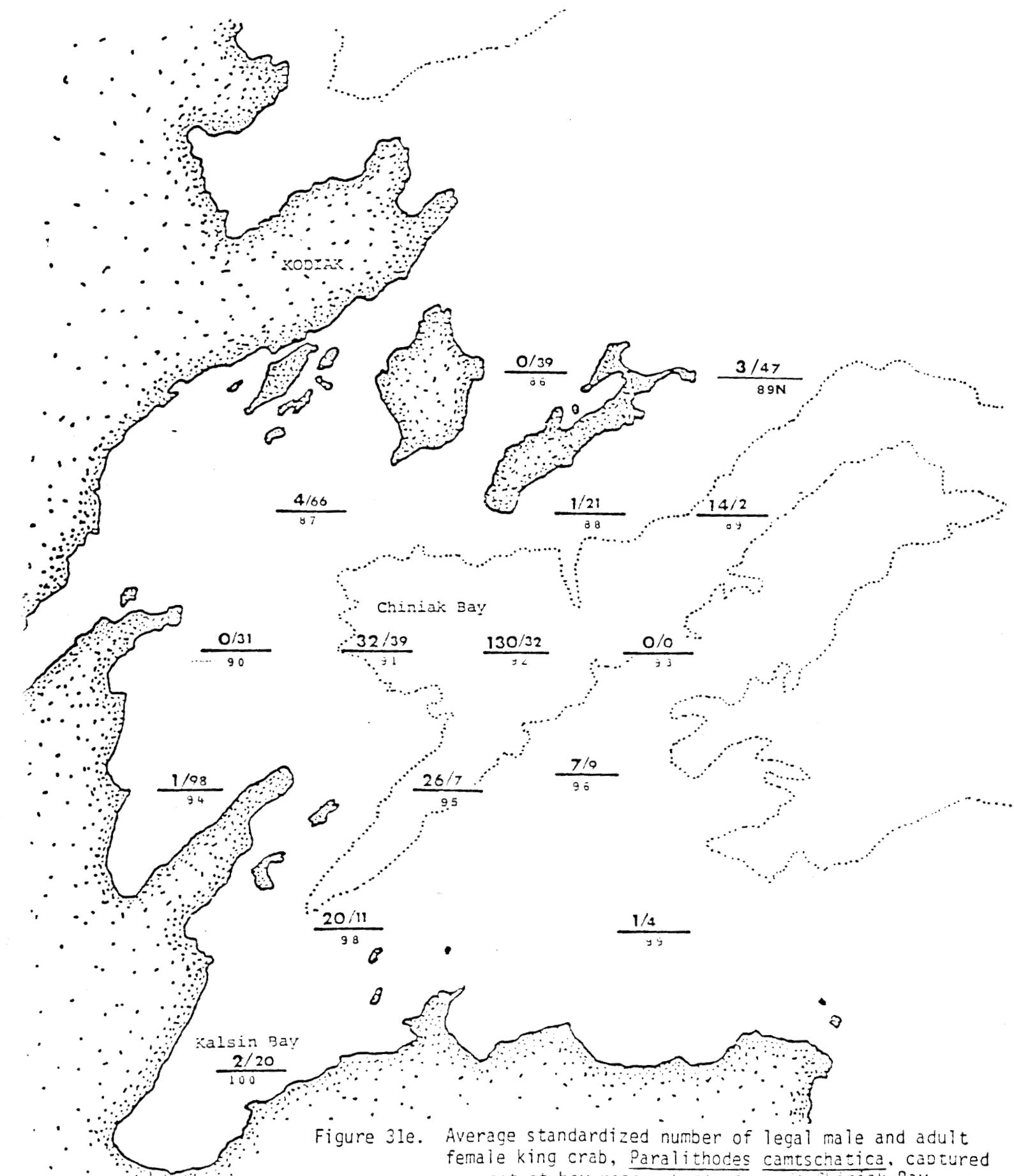


Figure 31e. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1976).

Presented as: Legal males/Adult females

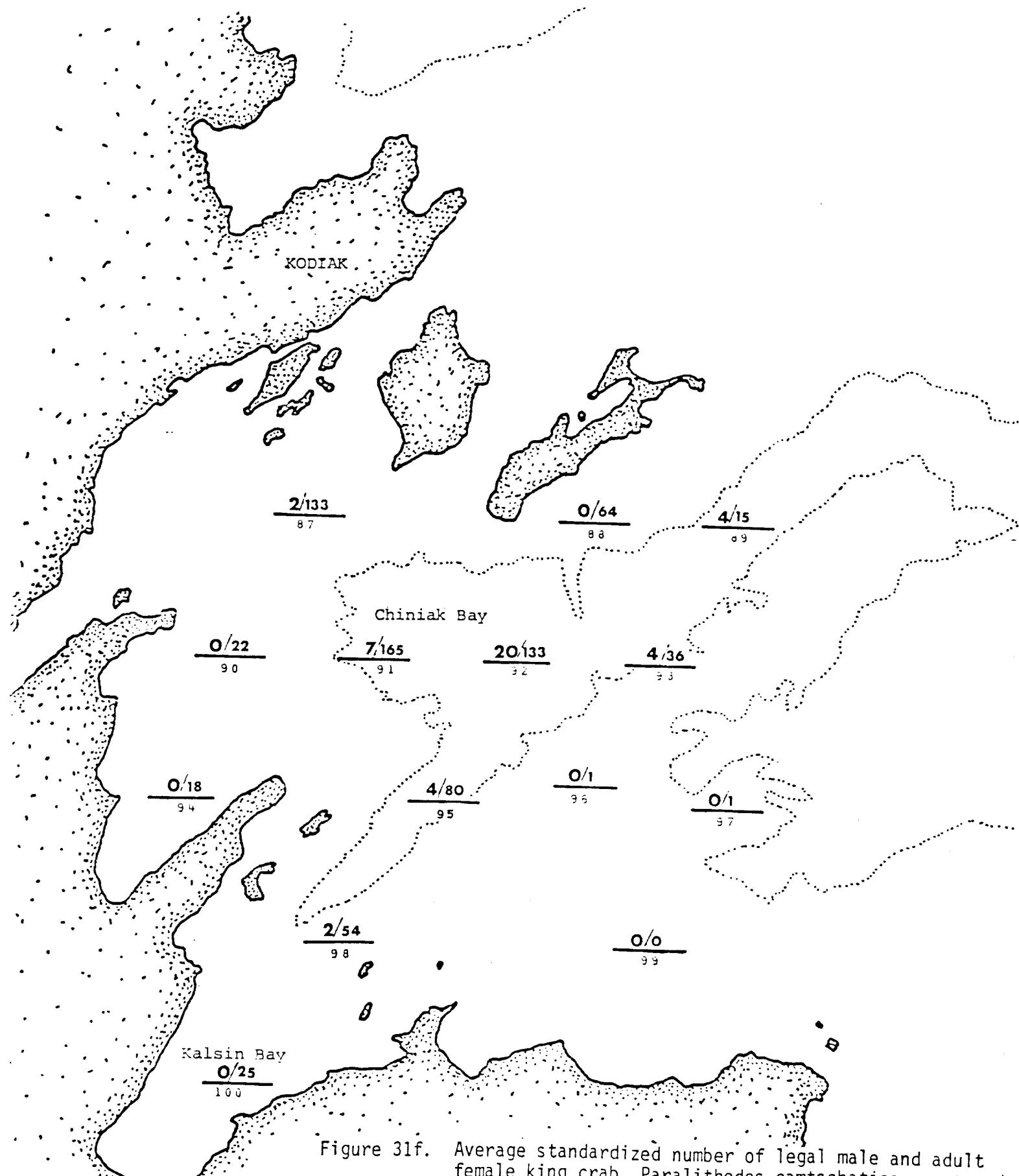


Figure 31f. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1977).

Presented as: Legal males/Adult females  
-262-

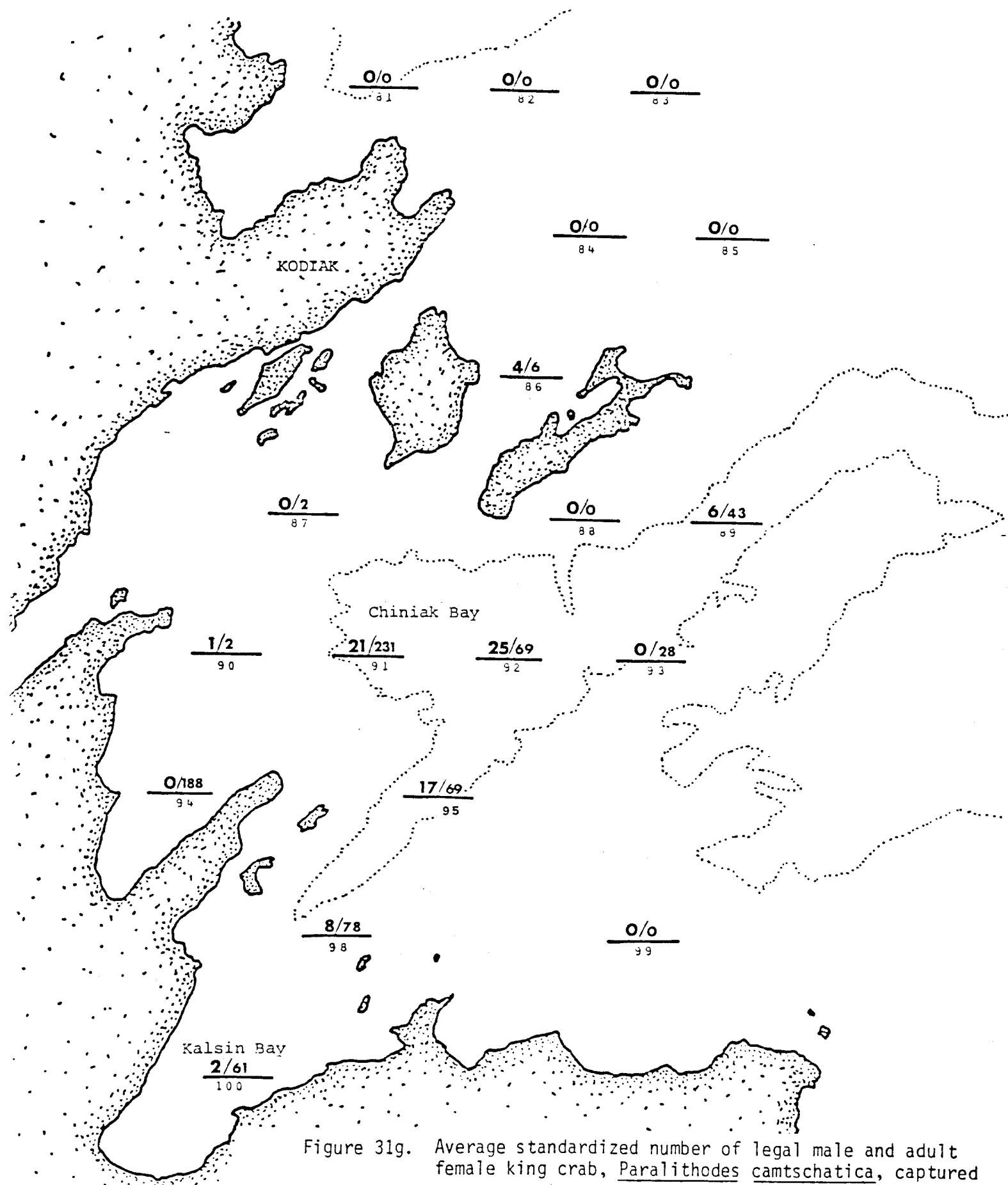


Figure 31g. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1979).

Presented as: Legal males/Adult females

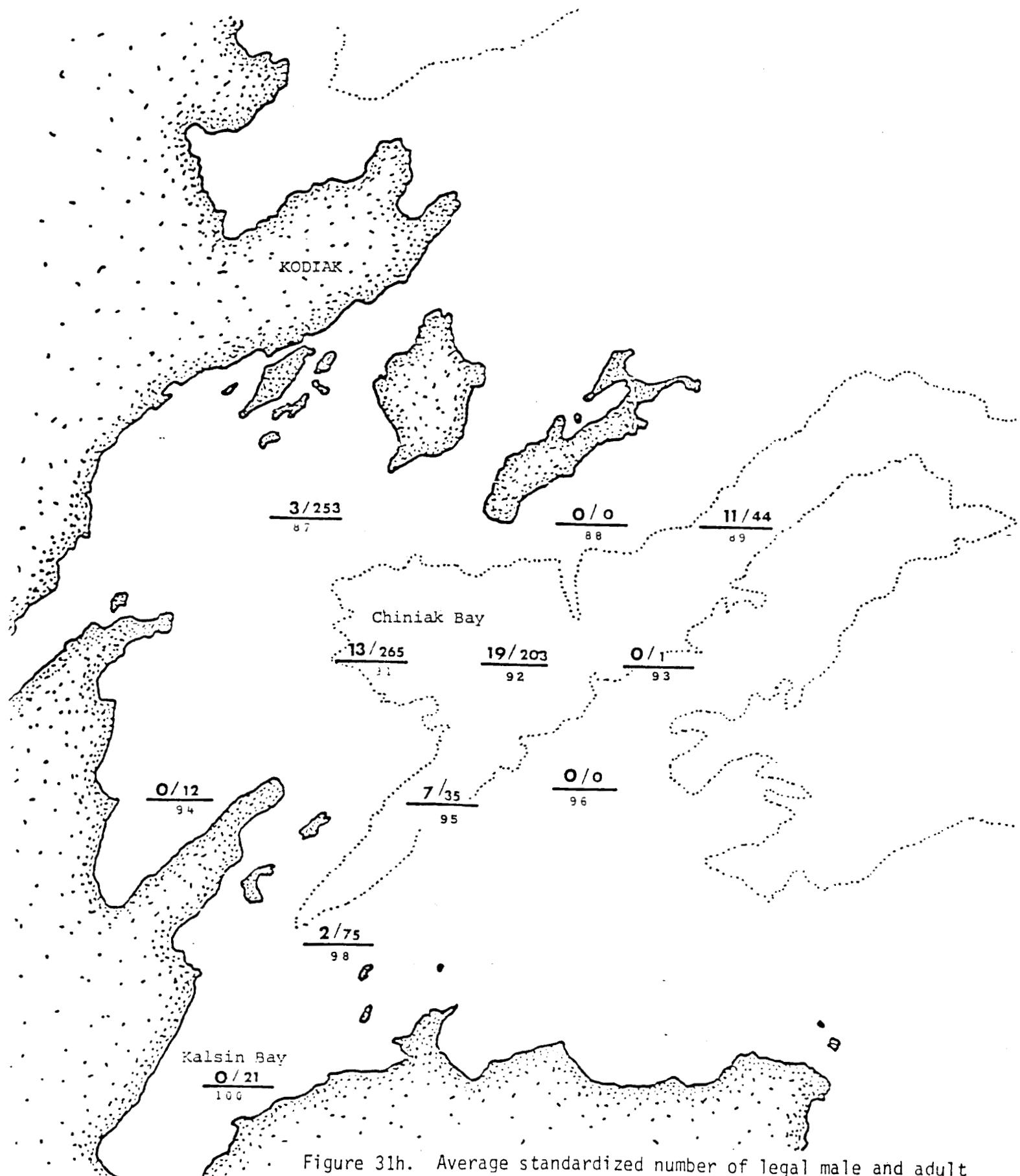


Figure 31h. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1980).

Presented as: Legal males/Adult females

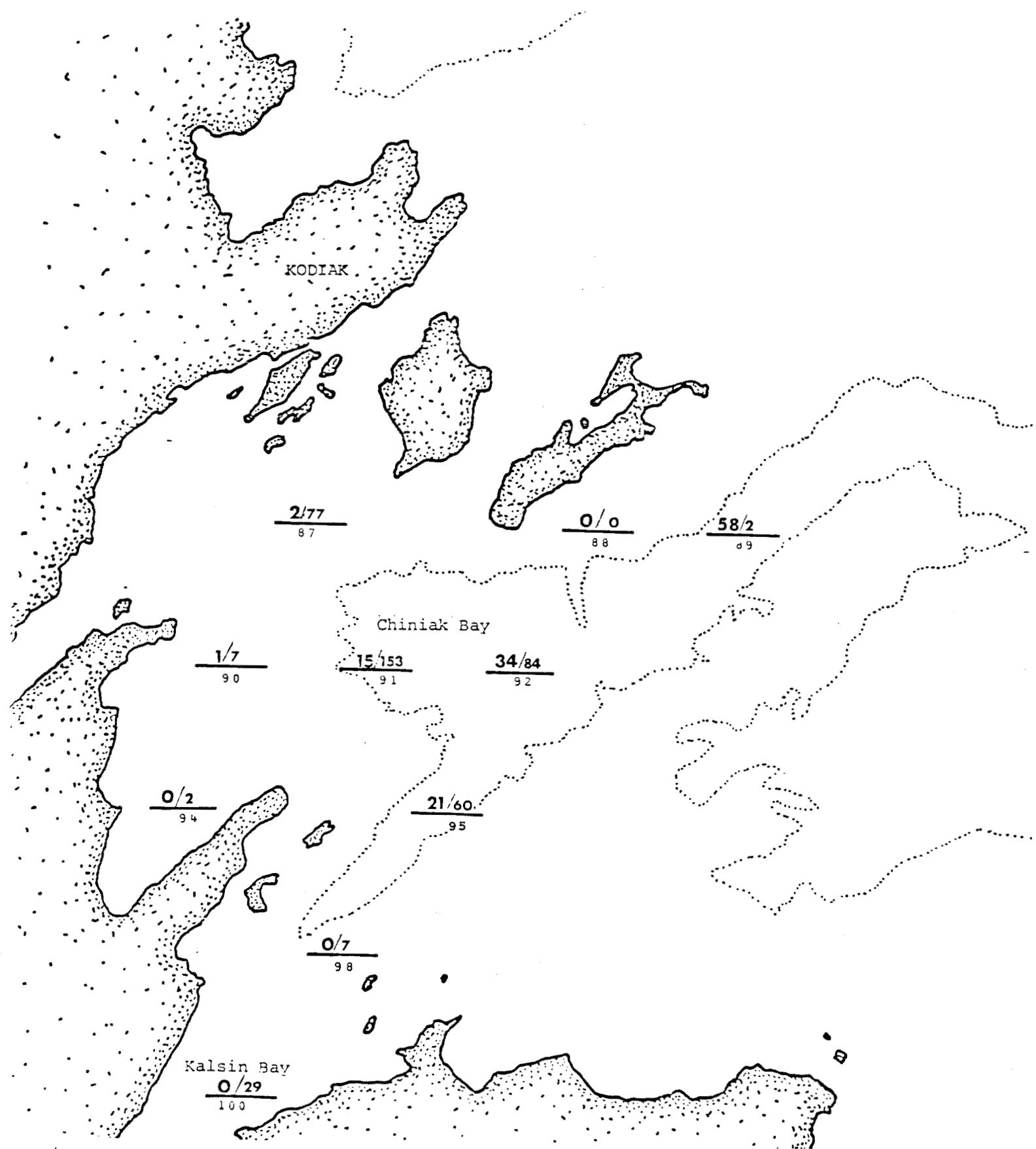


Figure 31i. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1981).

Presented as: Legal males/Adult females

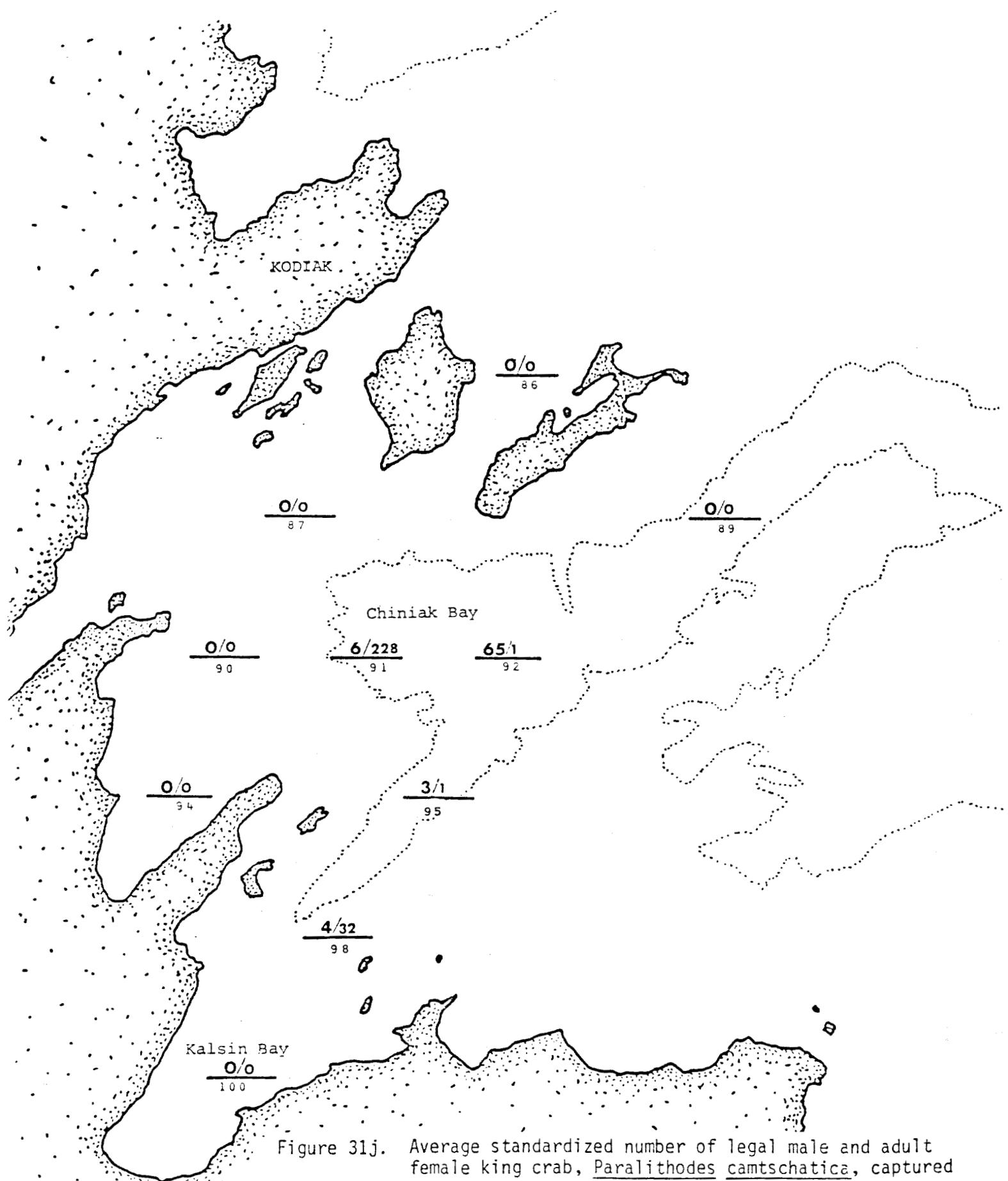


Figure 31j. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1982).

Presented as: Legal males/Adult females

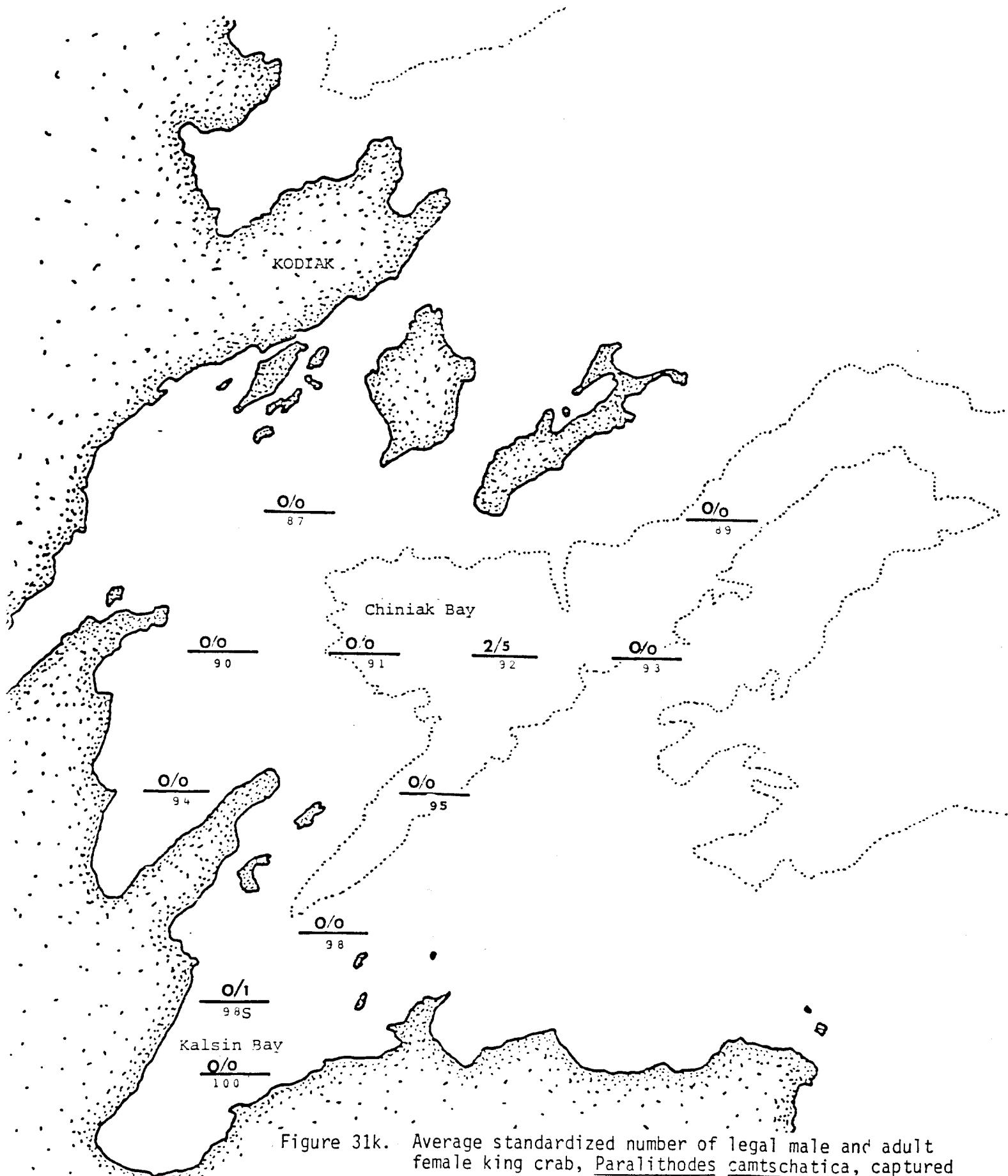


Figure 31k. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1983).

Presented as: Legal males/Adult females

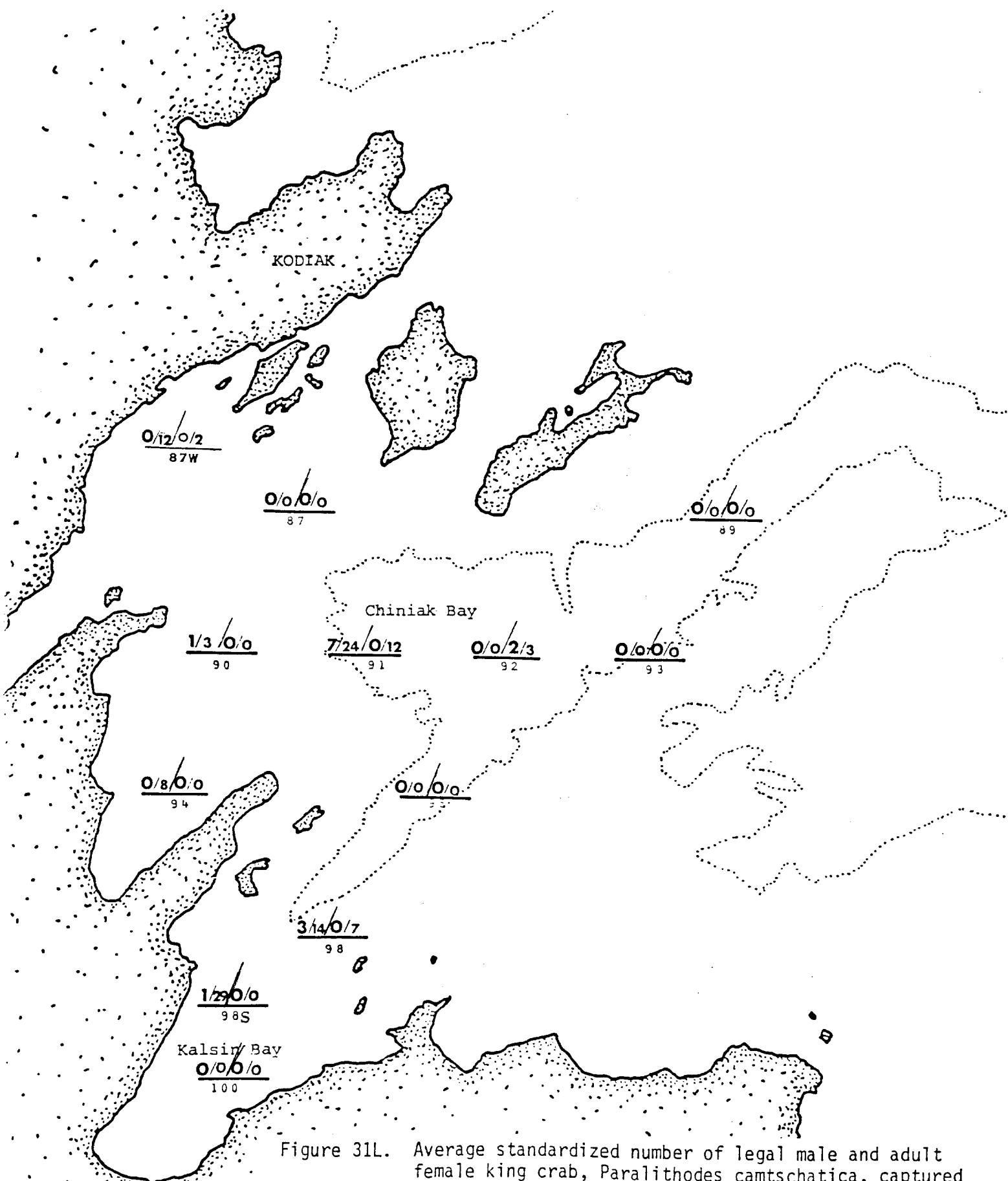


Figure 31L. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1984).

(Survey 1) (Survey 2)  
Presented as: Legal males and Adult females/Legal males and  
Adult females

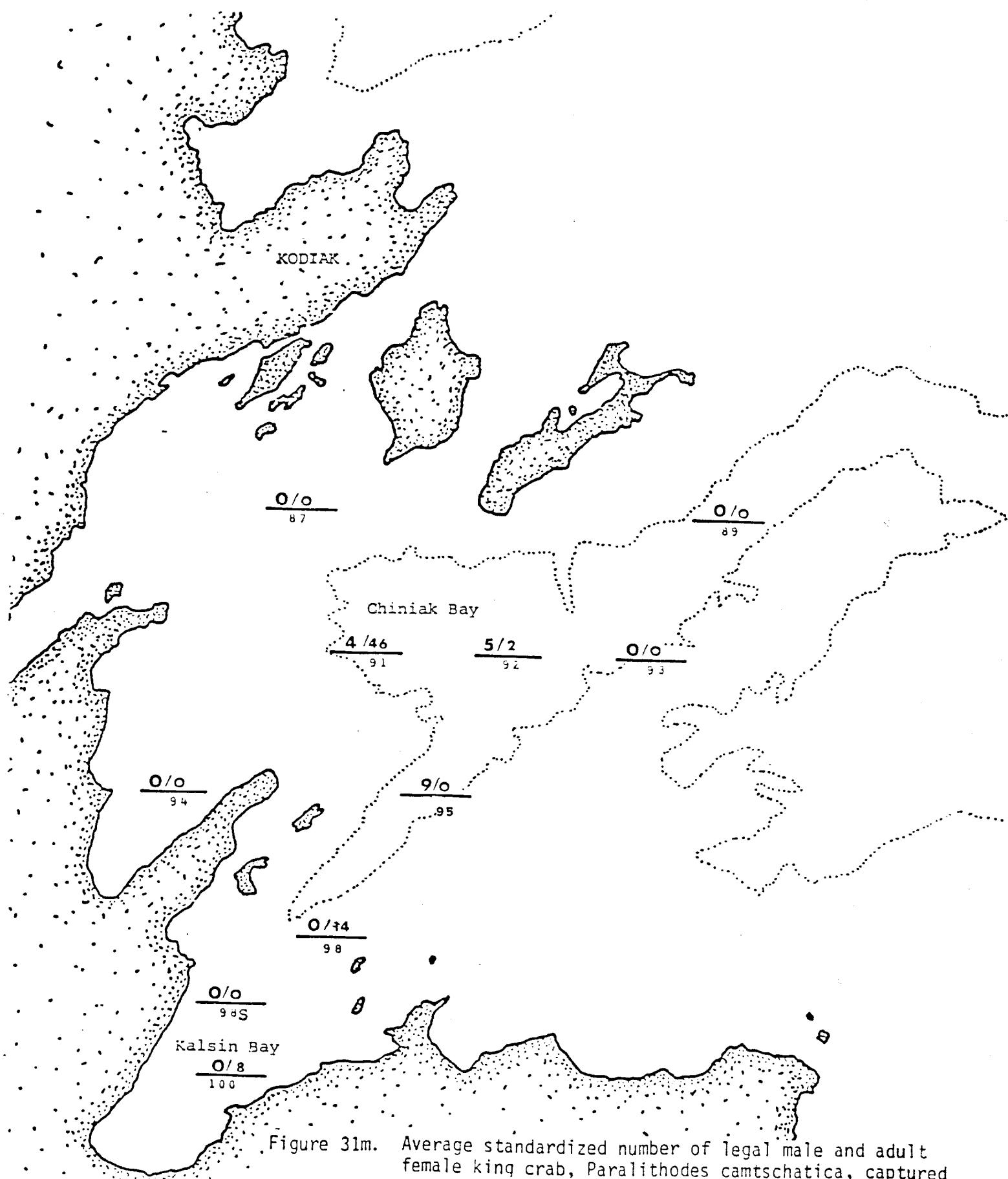


Figure 31m. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1985).

Presented as: Legal males/Adult females

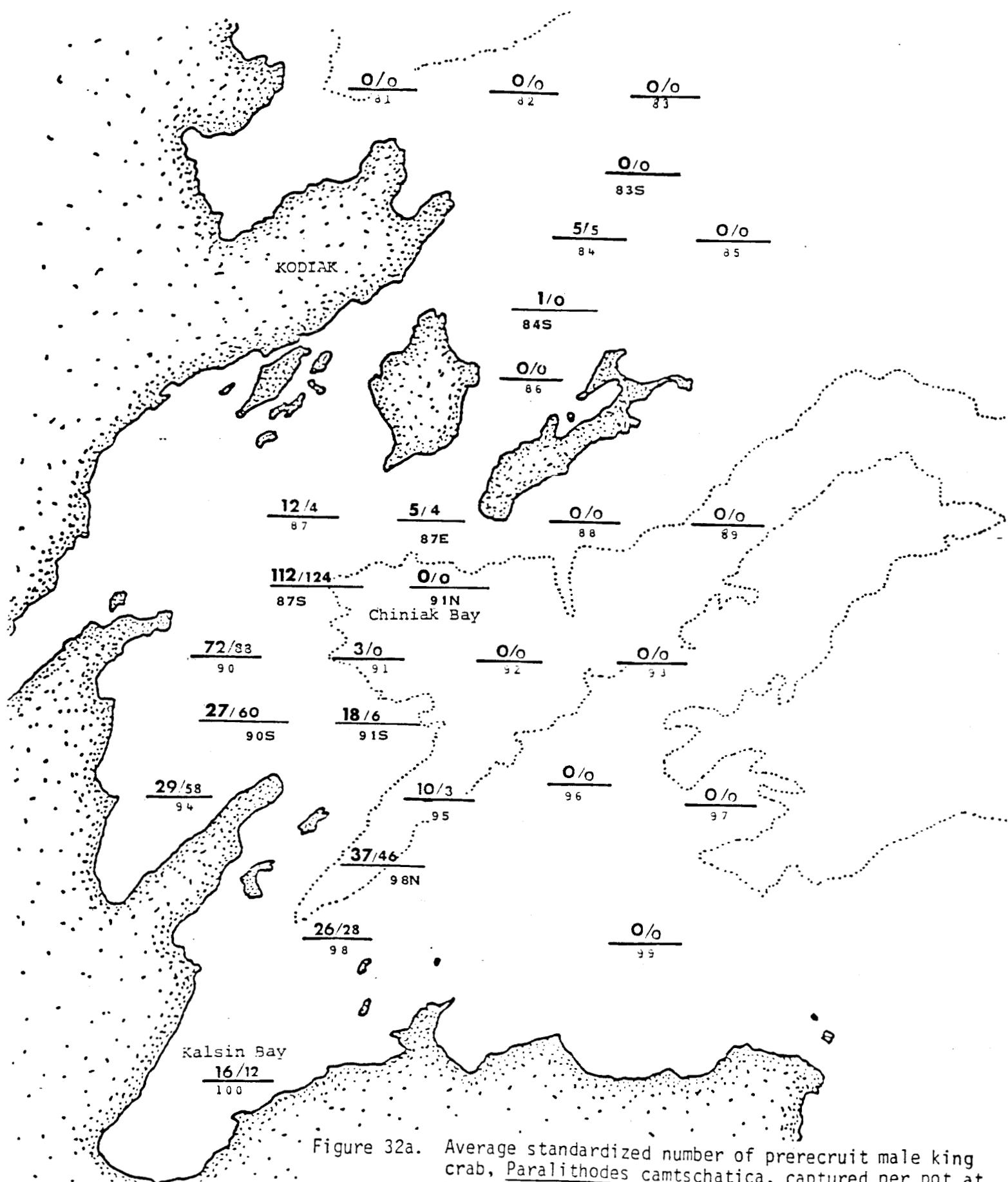


Figure 32a. Average standardized number of prae-recruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1972).

Presented as: 1's + 2's/3's + 4's

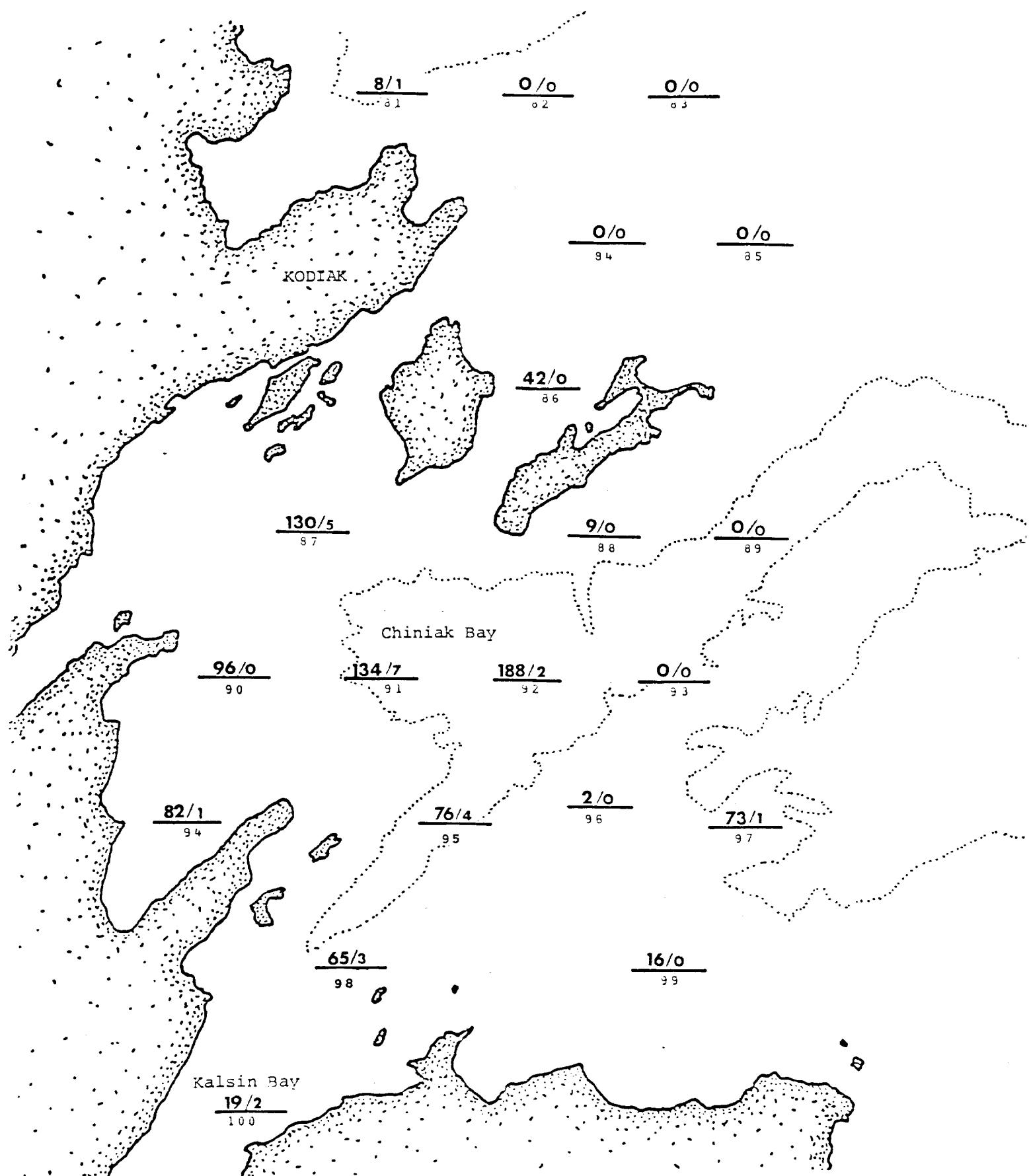


Figure 32b. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1973).

Presented as : 1's + 2's/3's + 4's

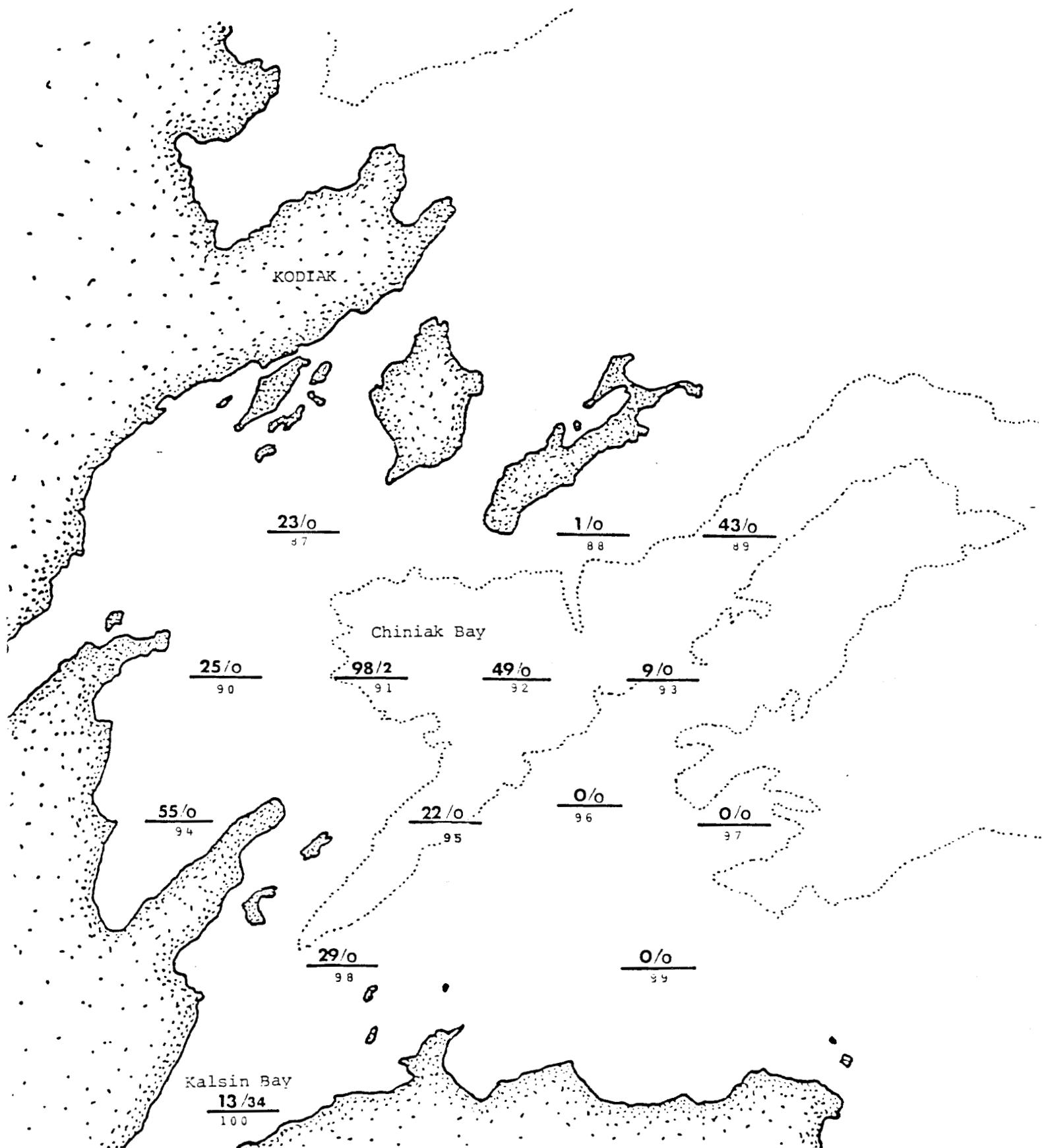


Figure 32c. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1974).

Presented as : 1's + 2's/3's + 4's

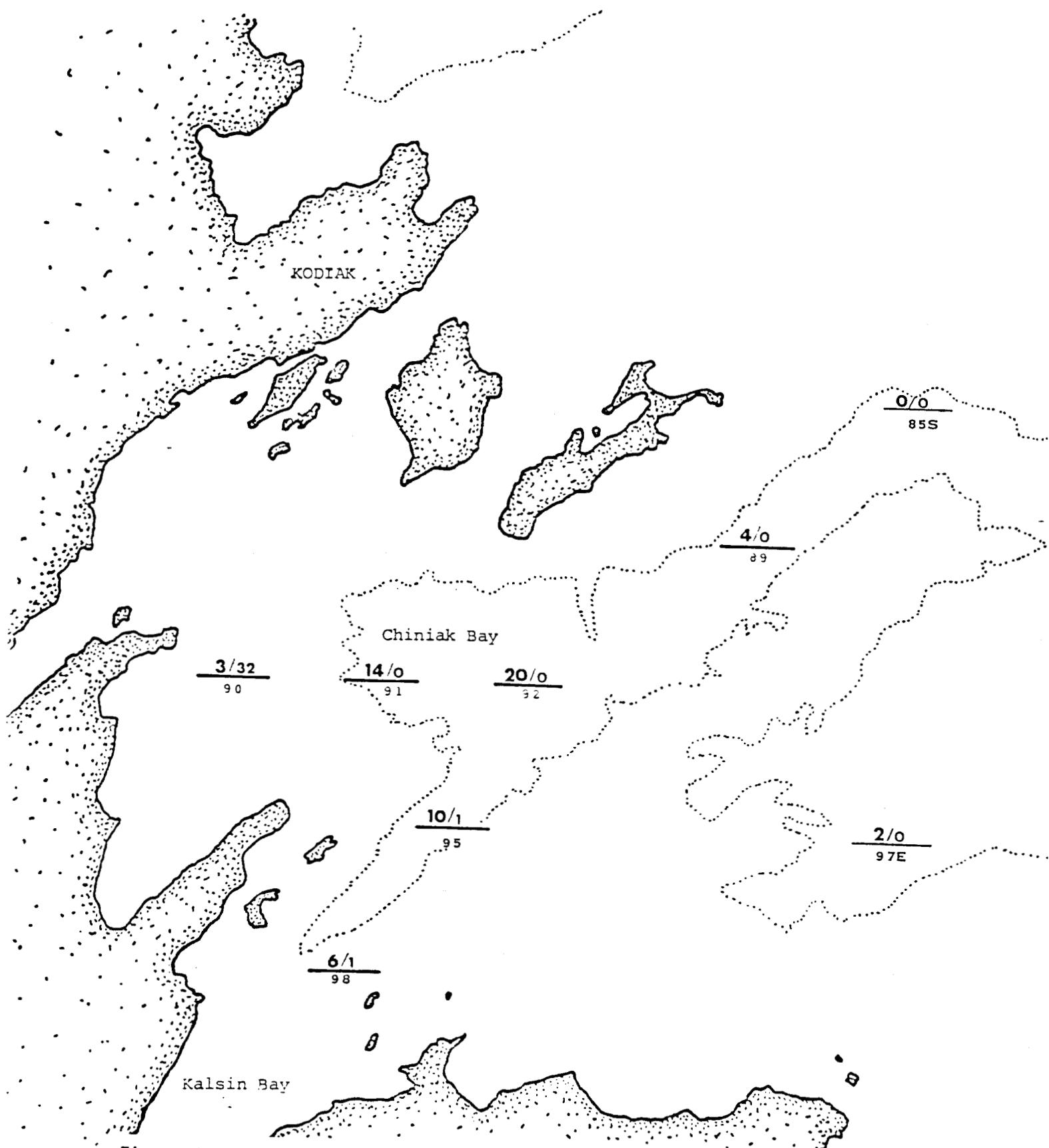


Figure 32d. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1975).

Presented as : 1's + 2's/3's + 4's

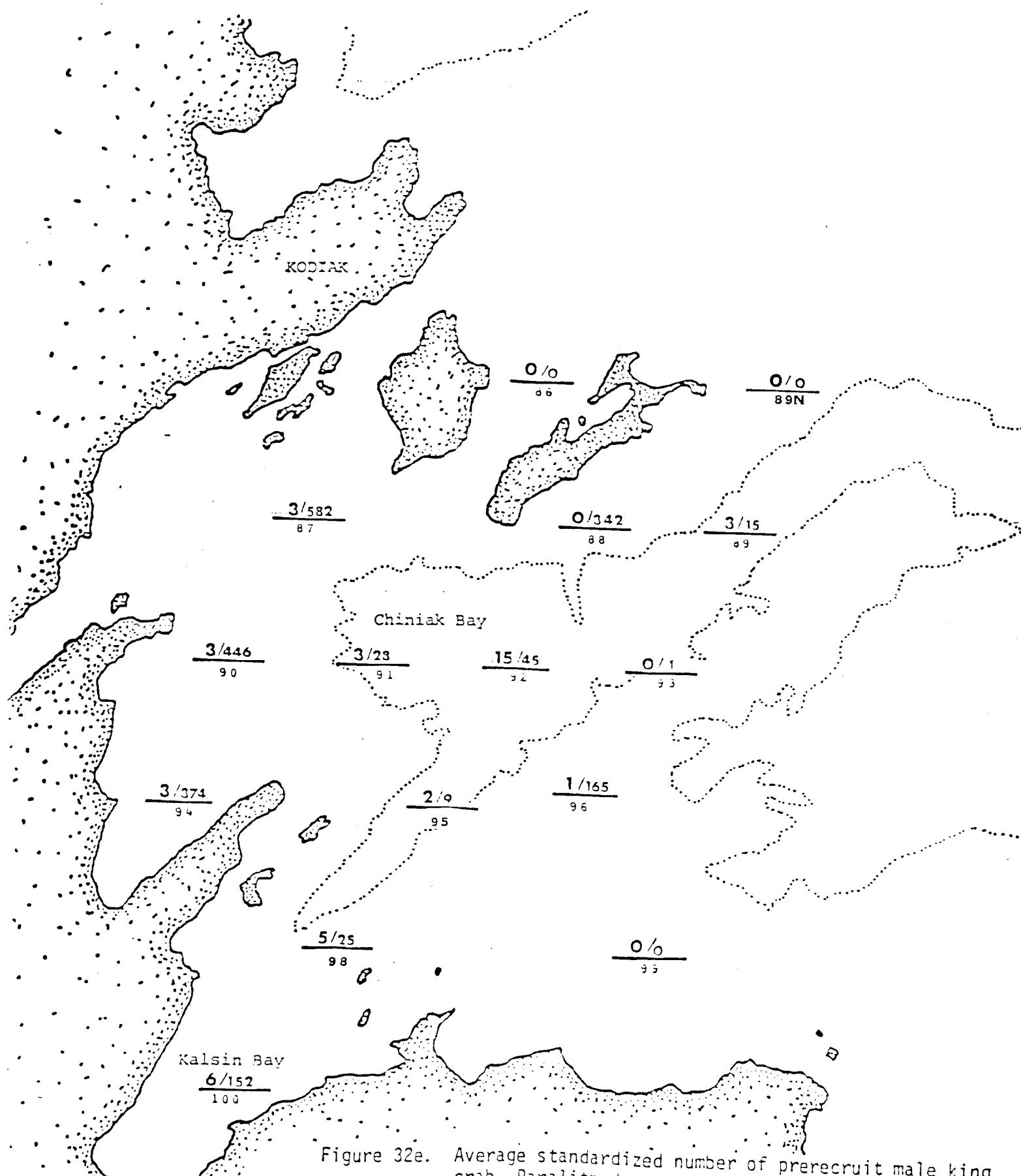


Figure 32e. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1976).

Presented as : 1's + 2's/3's + 4's  
-274-

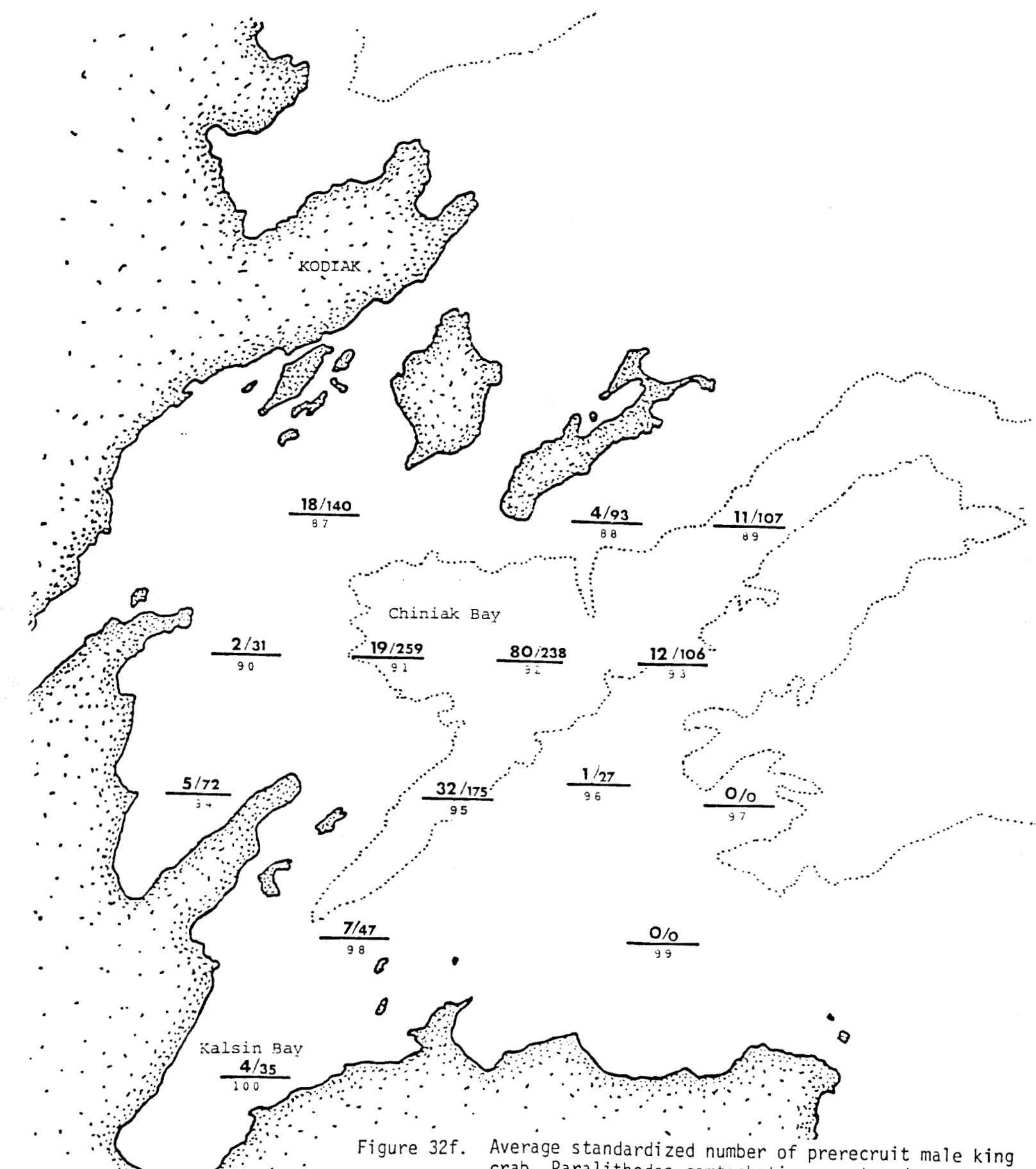


Figure 32f. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1977).

Presented as : 1's + 2's/3's + 4's

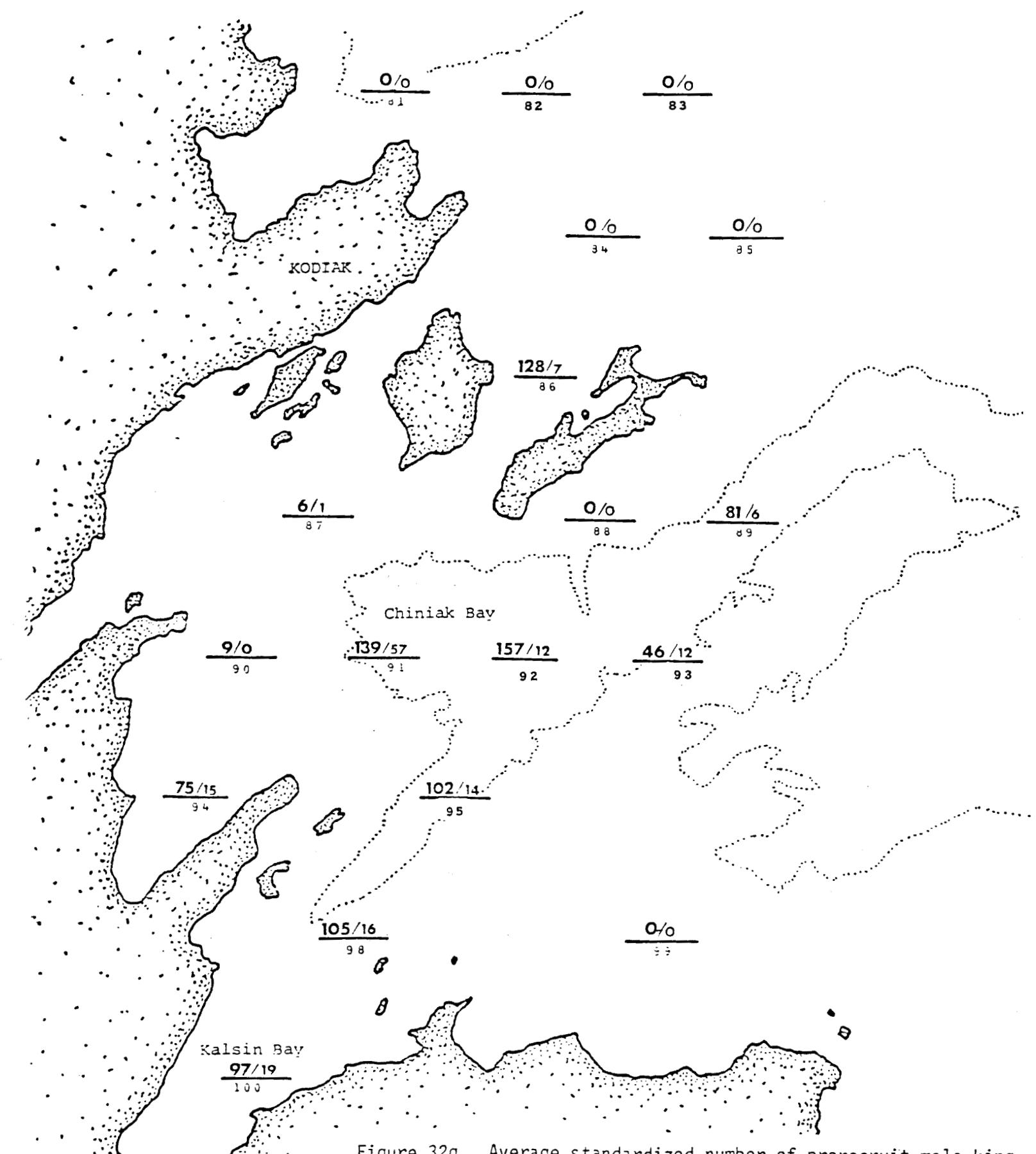


Figure 32g. Average standardized number of prae-recruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1979).

Presented as : 1's + 2's/3's + 4's

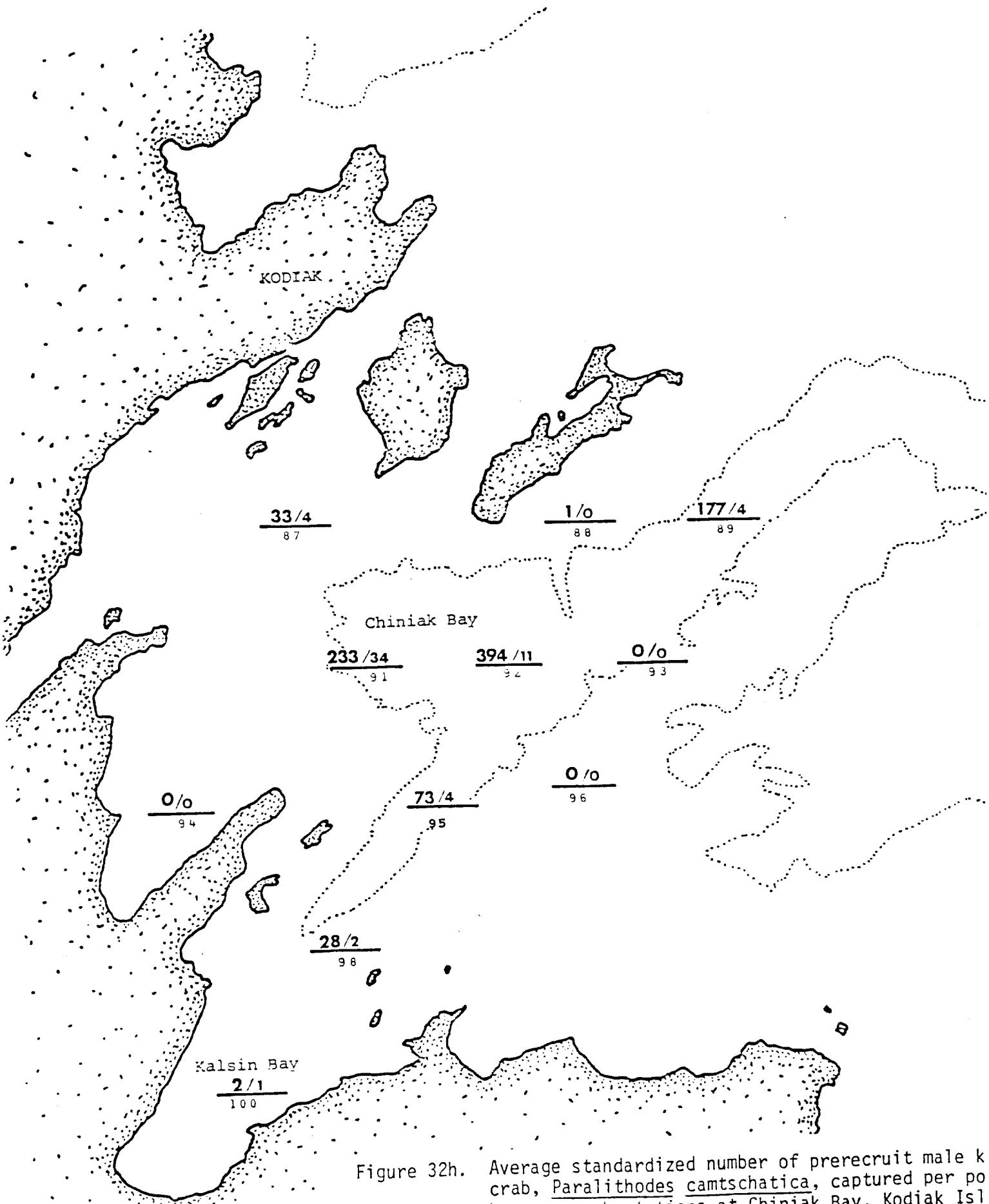


Figure 32h. Average standardized number of prerecruit male k crab, *Paralithodes camtschatica*, captured per po bay research stations at Chiniak Bay, Kodiak Isl (1980).

Presented as : 1's + 2's/3's + 4's

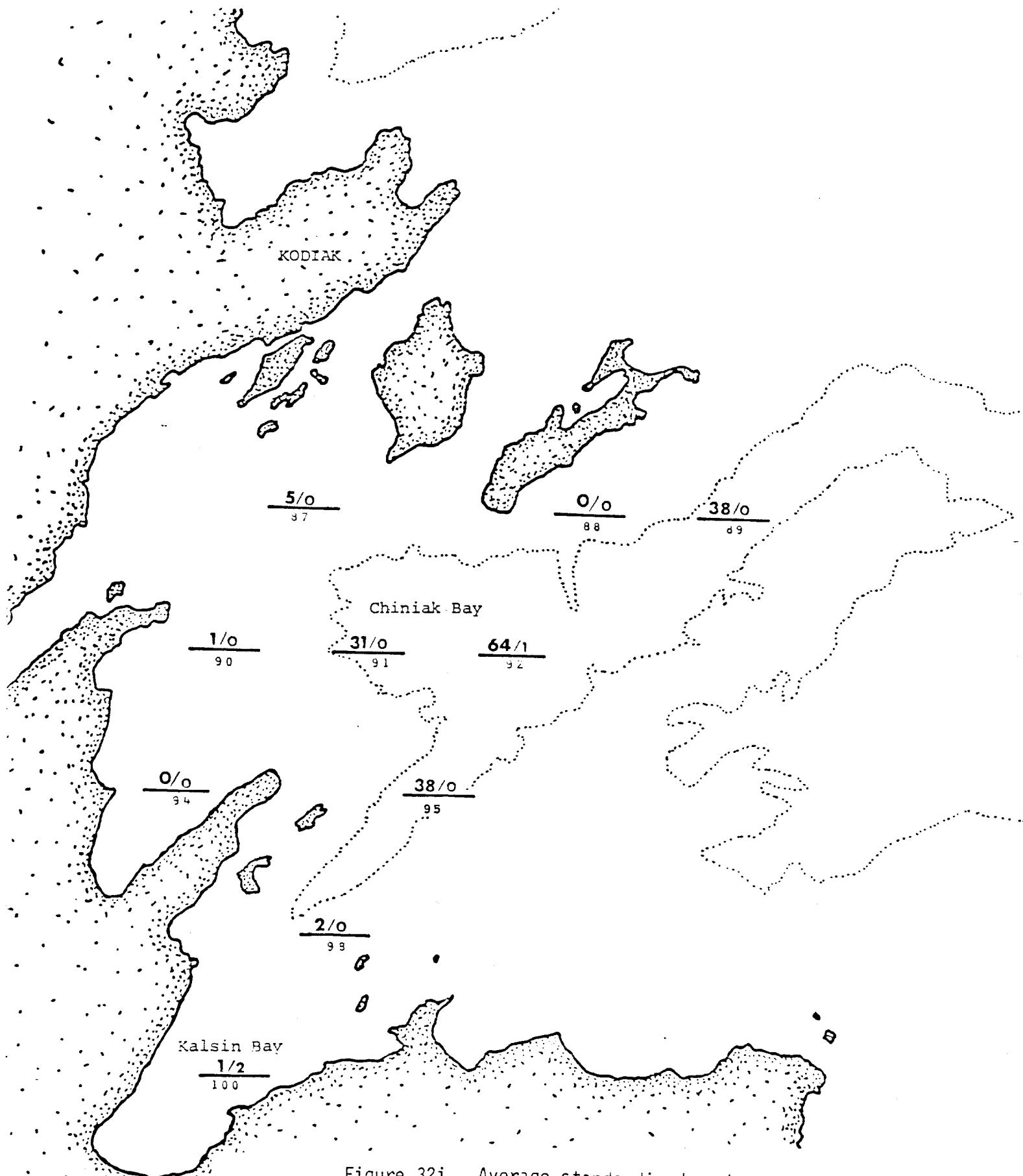


Figure 32i. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1981).

Presented as : 1's + 2's/3's + 4's

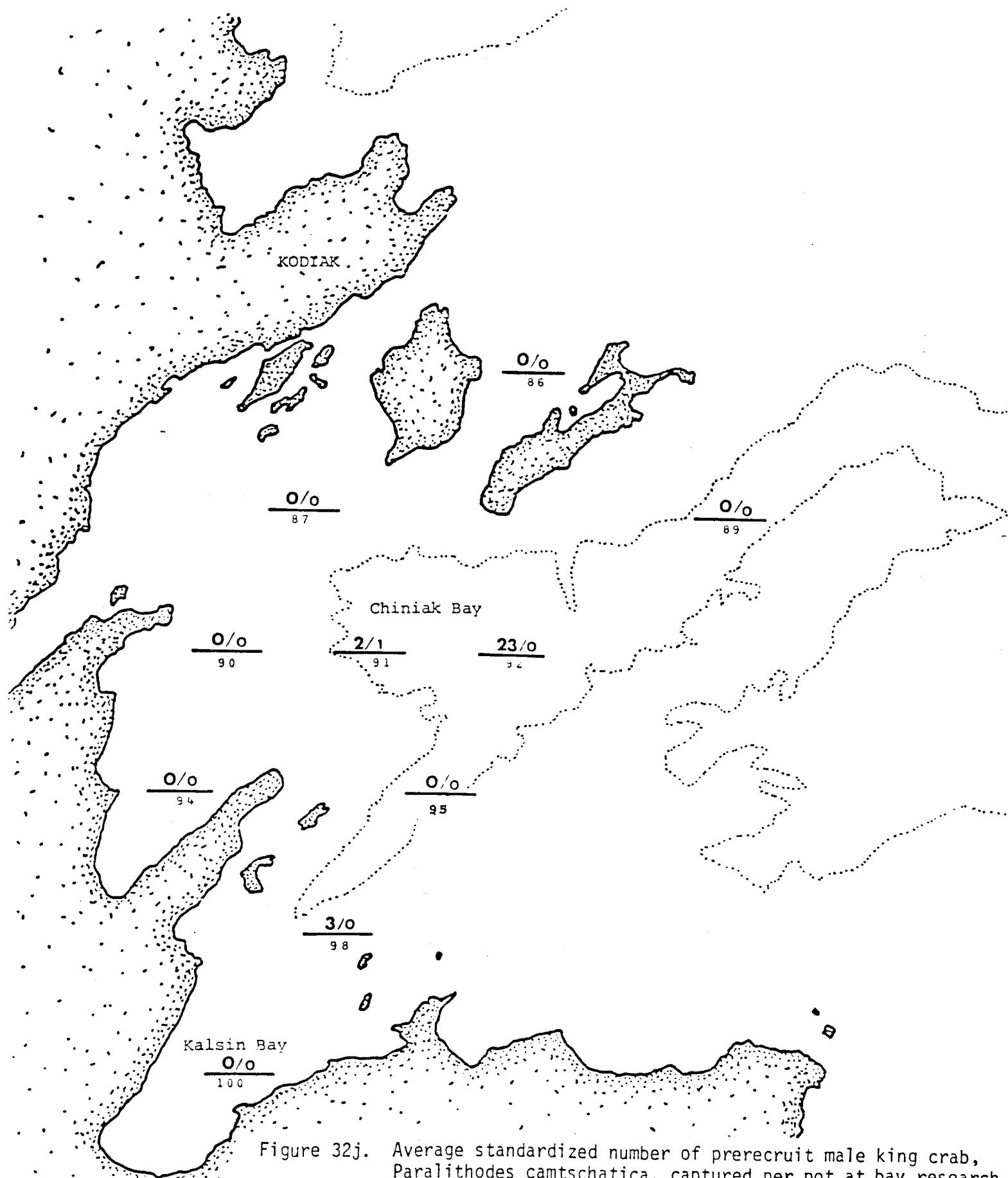


Figure 32j. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1982).

Presented as : 1's + 2's/3's + 4's

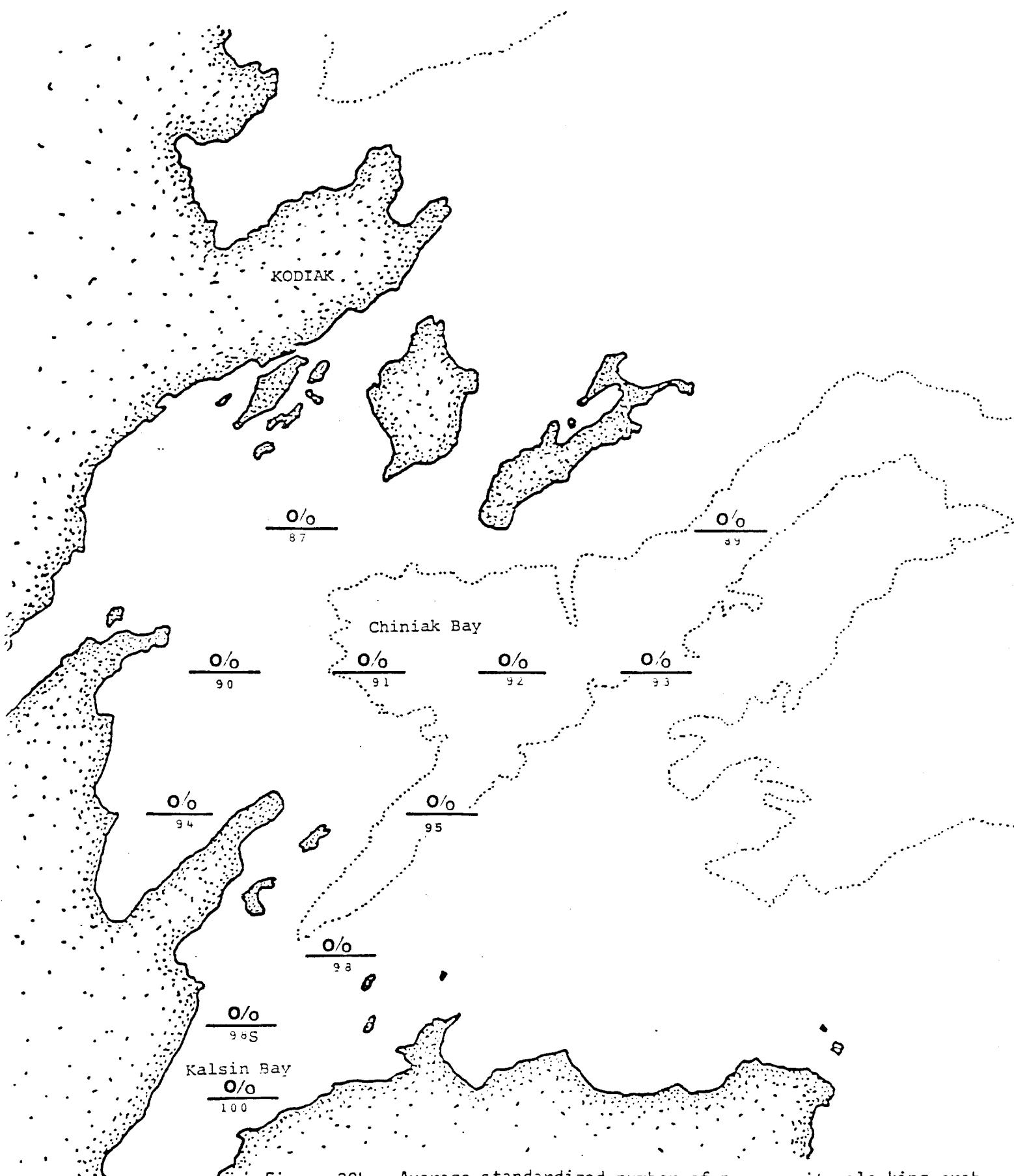


Figure 32k. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1983).

Presented as : 1's + 2's/3's + 4's

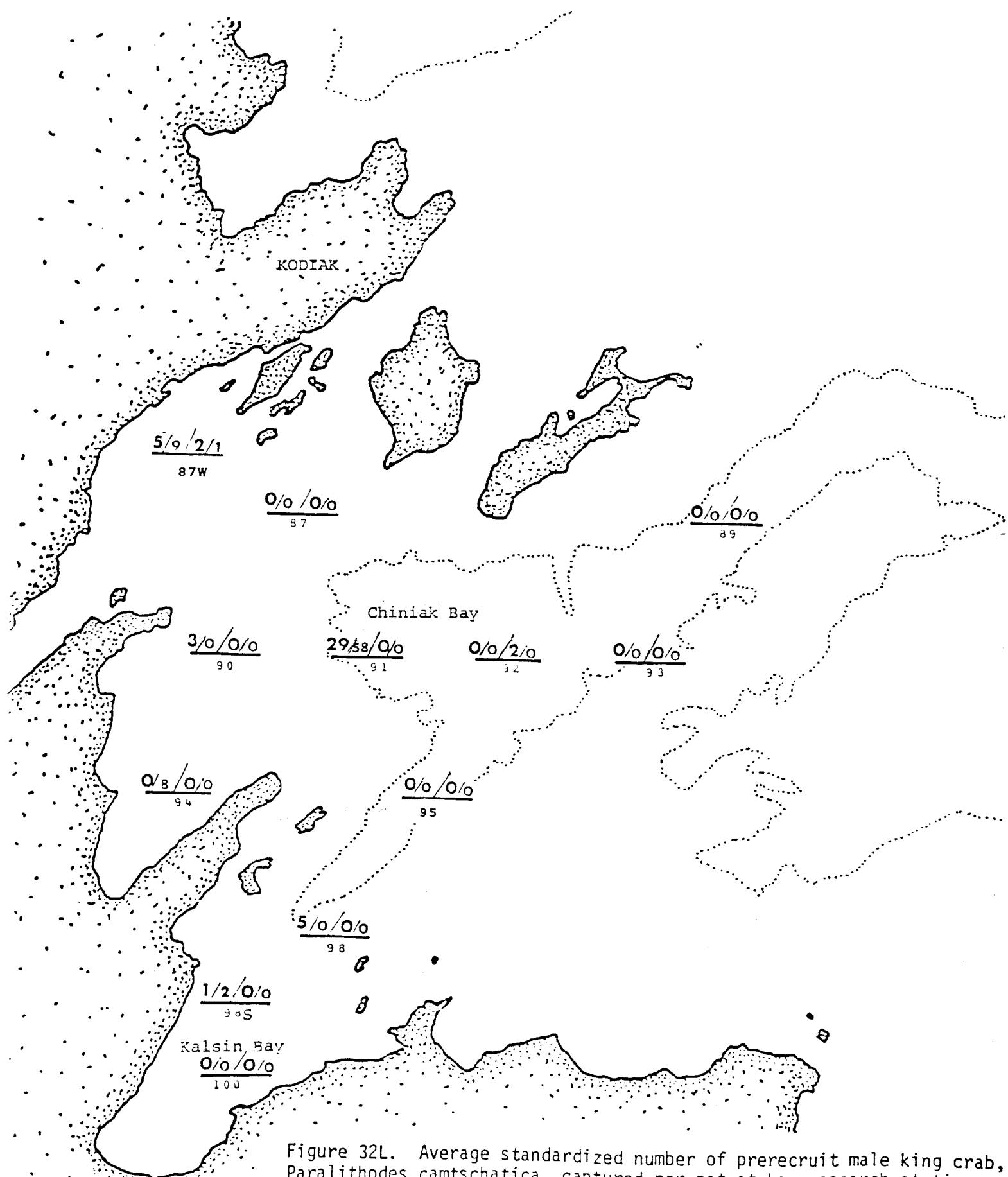


Figure 32L. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1984).

(Survey 1) (Survey 2)  
 Presented as : 1's + 2's/3's + 4's / 1's + 2's/3's + 4's

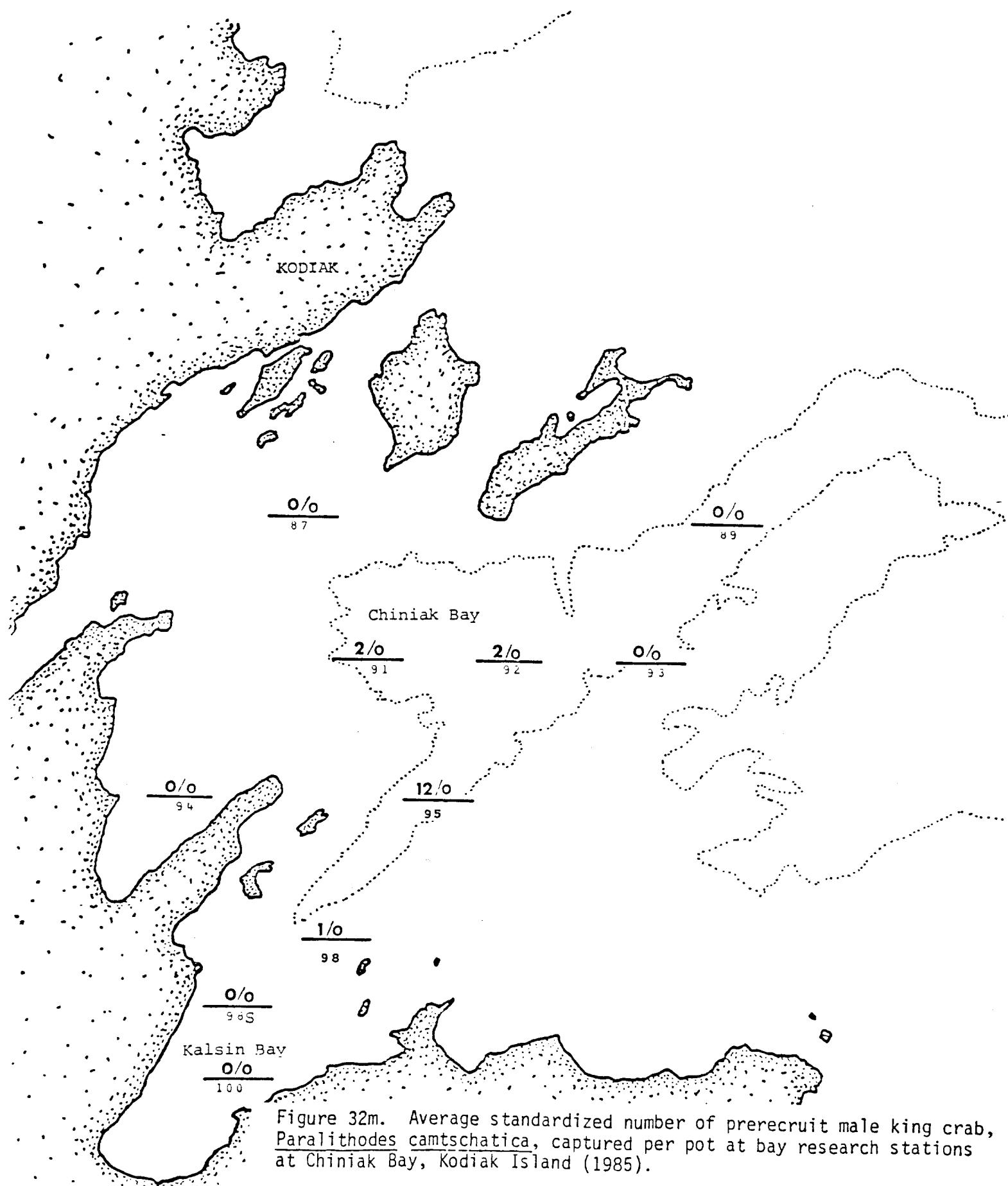


Figure 32m. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1985).

Presented as : 1's + 2's/3's + 4's

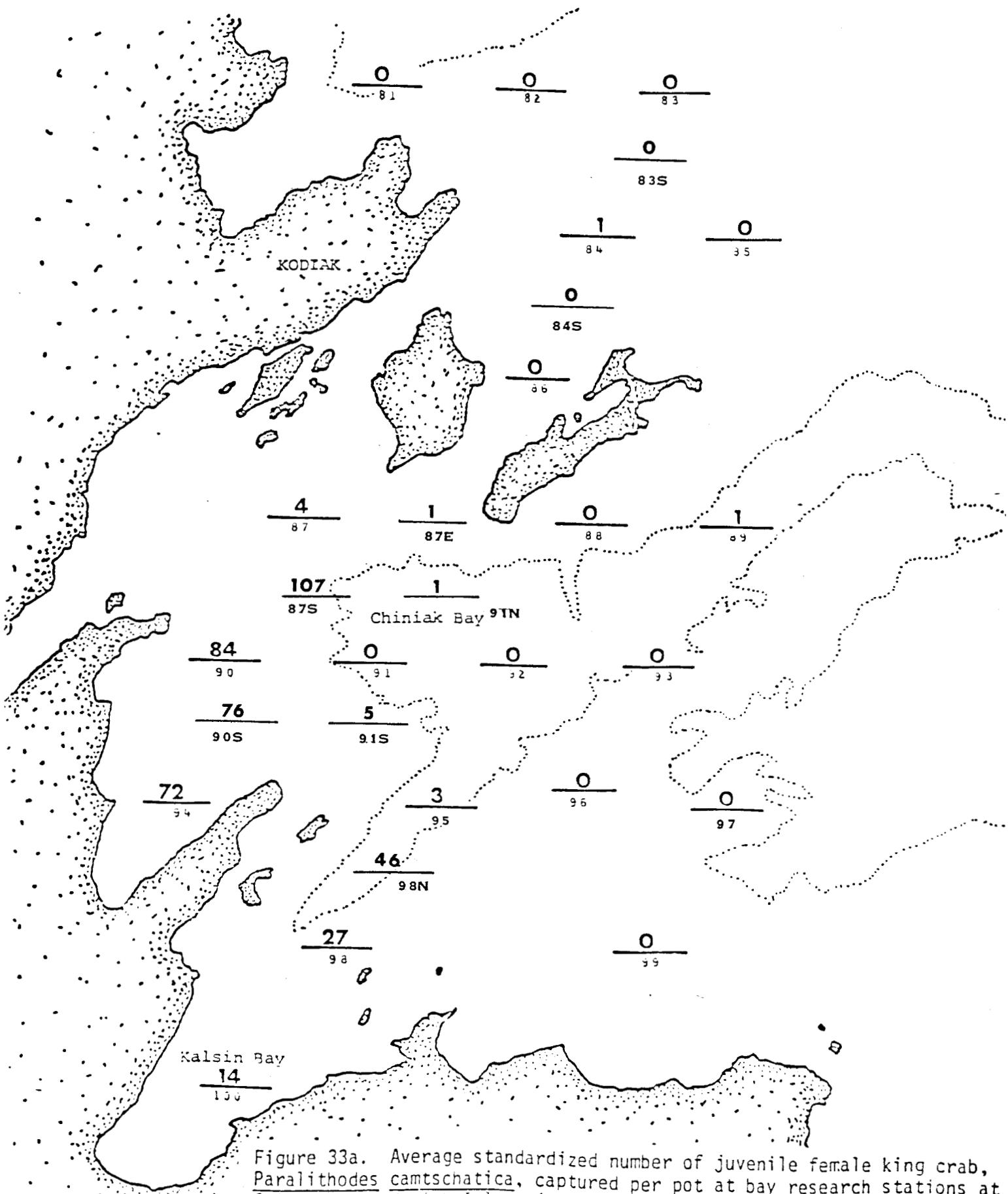


Figure 33a. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1972).

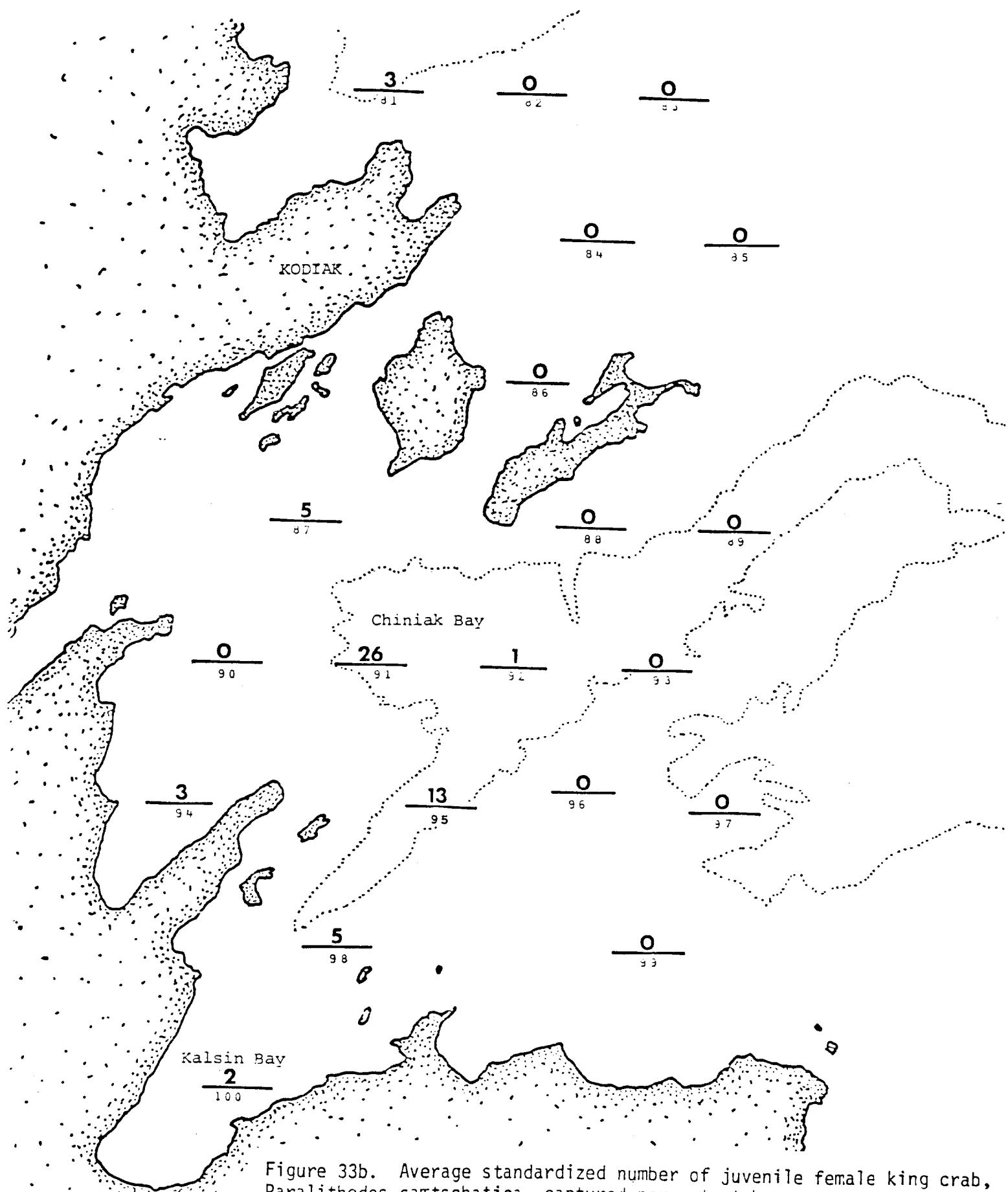


Figure 33b. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1973).

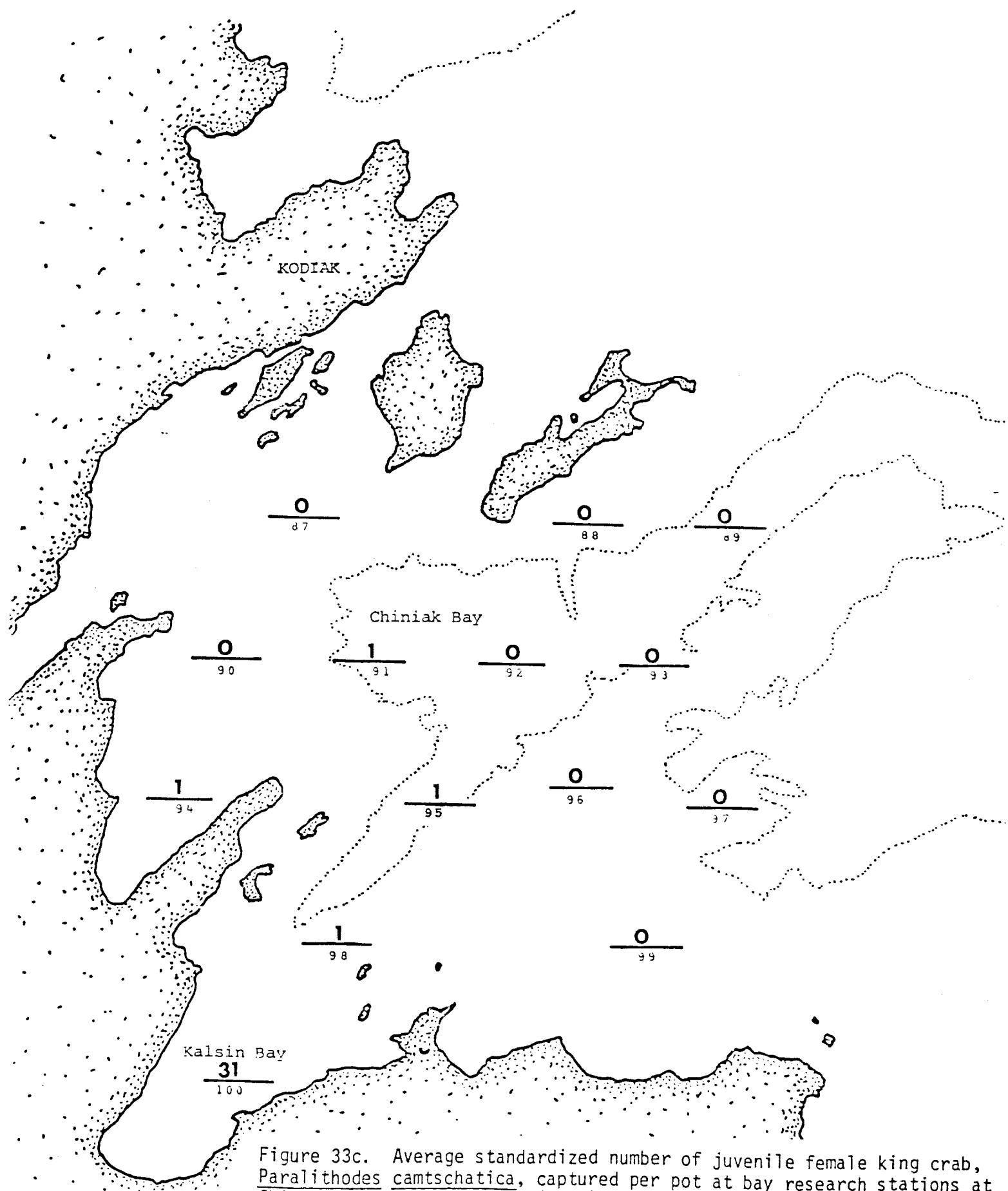


Figure 33c. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1974).

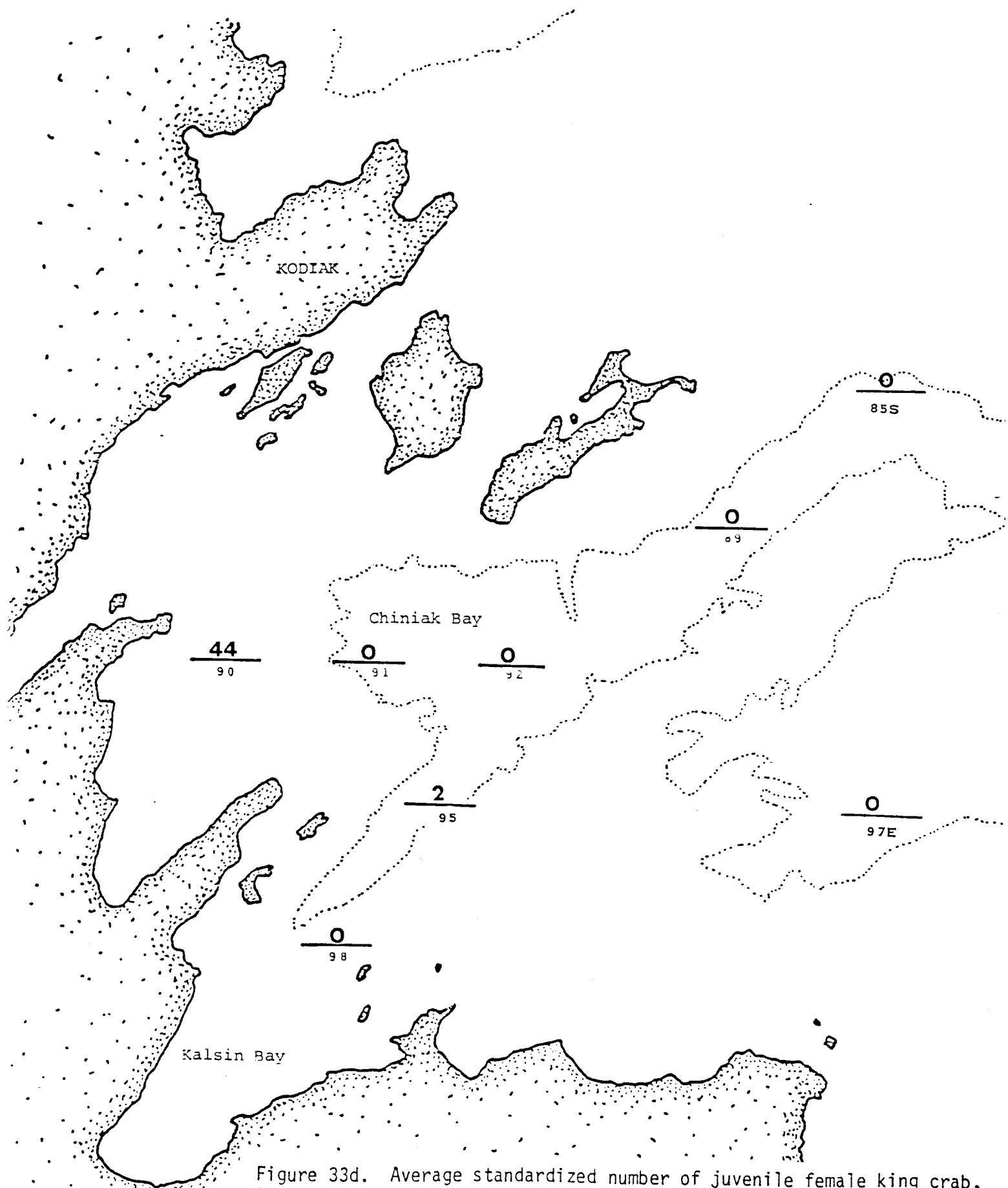


Figure 33d. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1975).

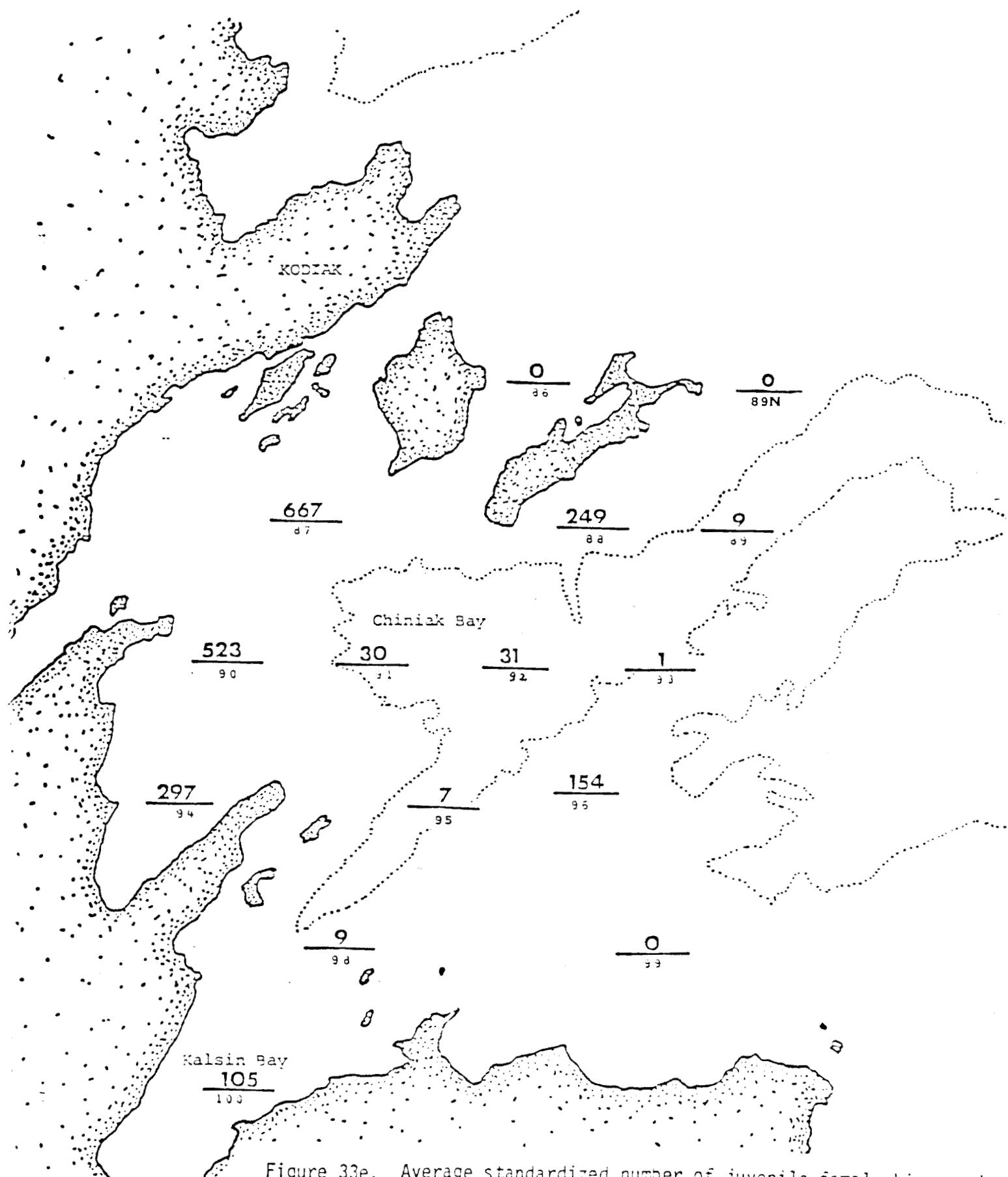


Figure 33e. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1976).

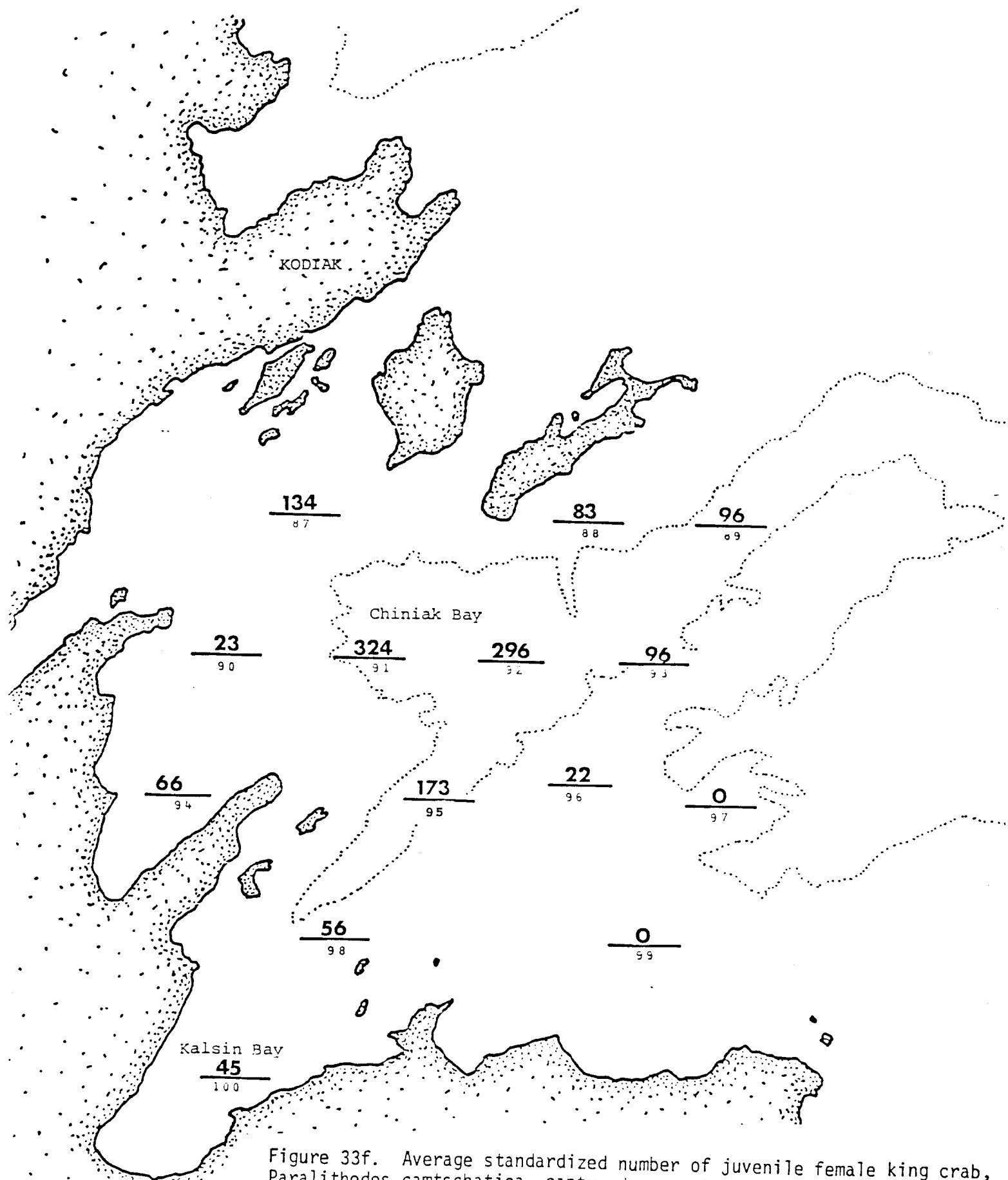


Figure 33f. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1977).

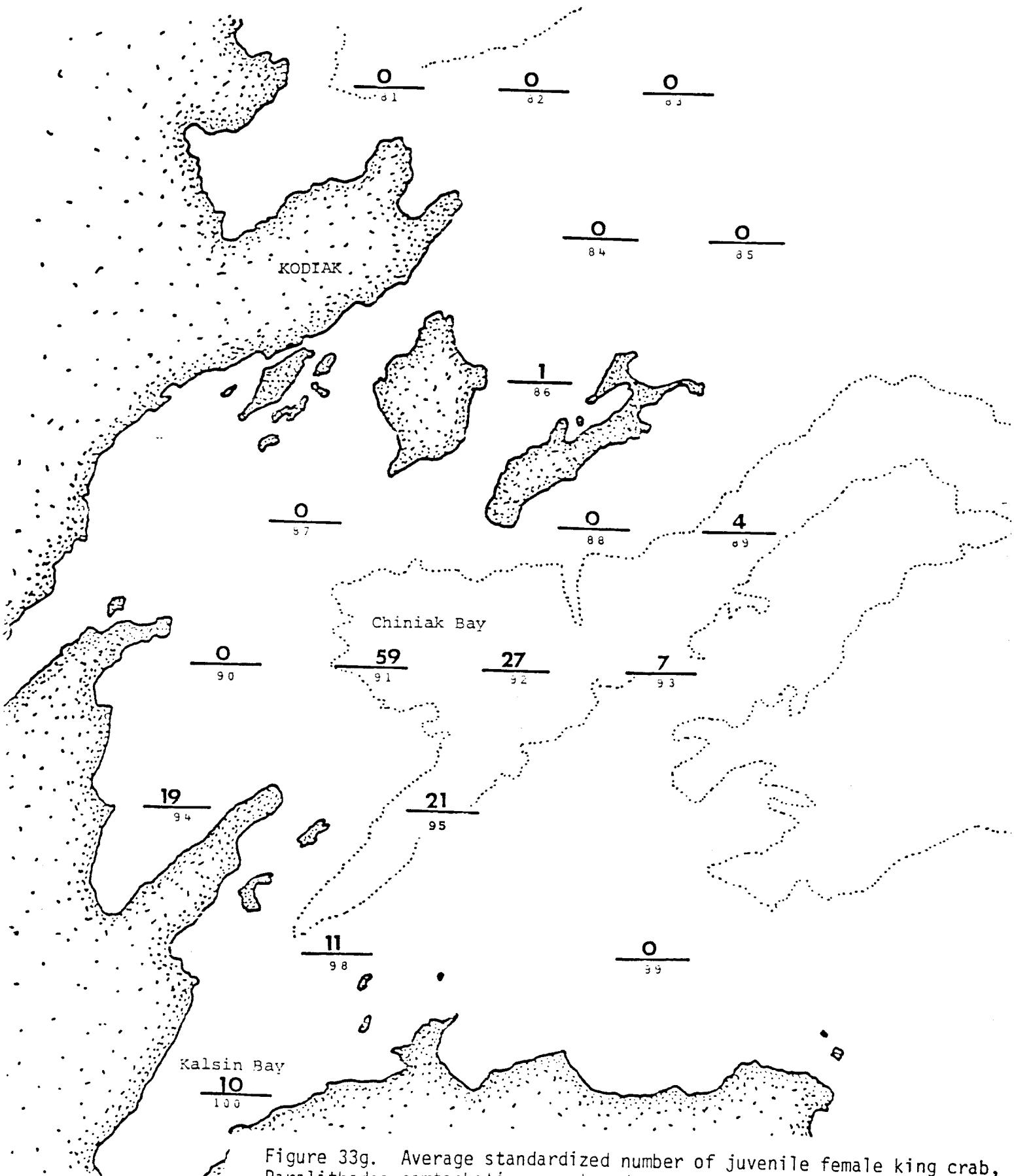


Figure 33g. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1979).

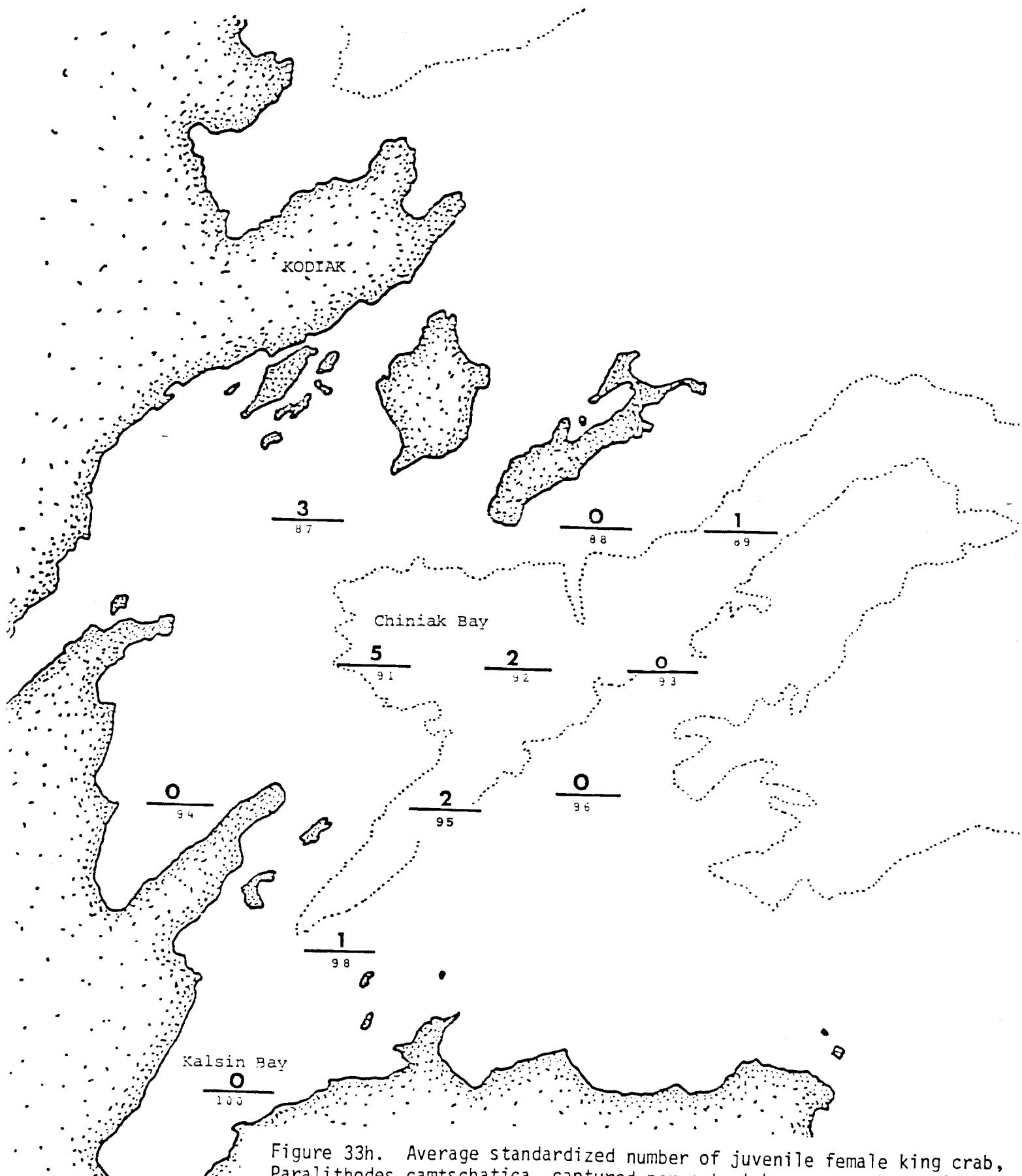


Figure 33h. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1980).

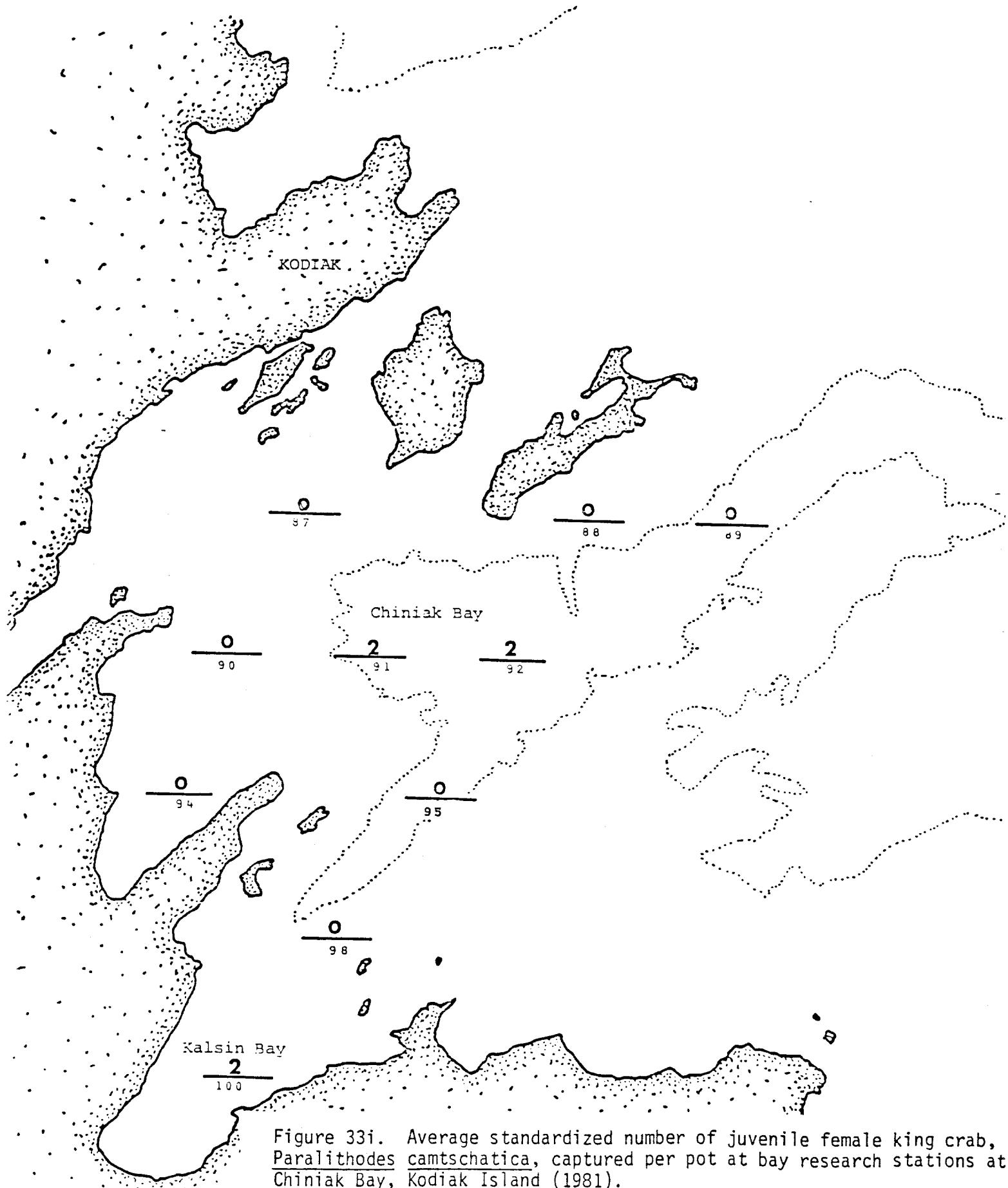


Figure 33i. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1981).

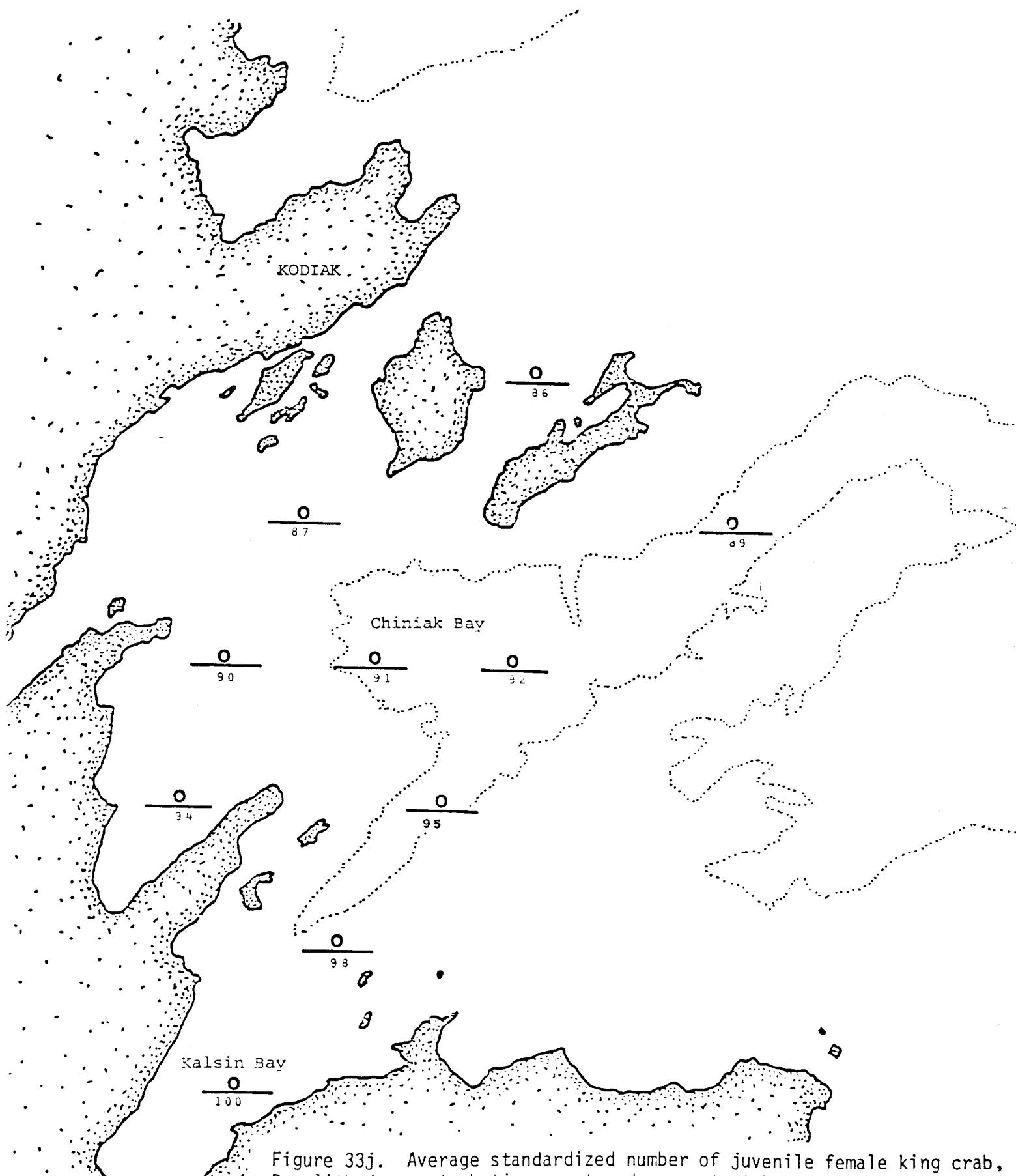


Figure 33j. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1982).

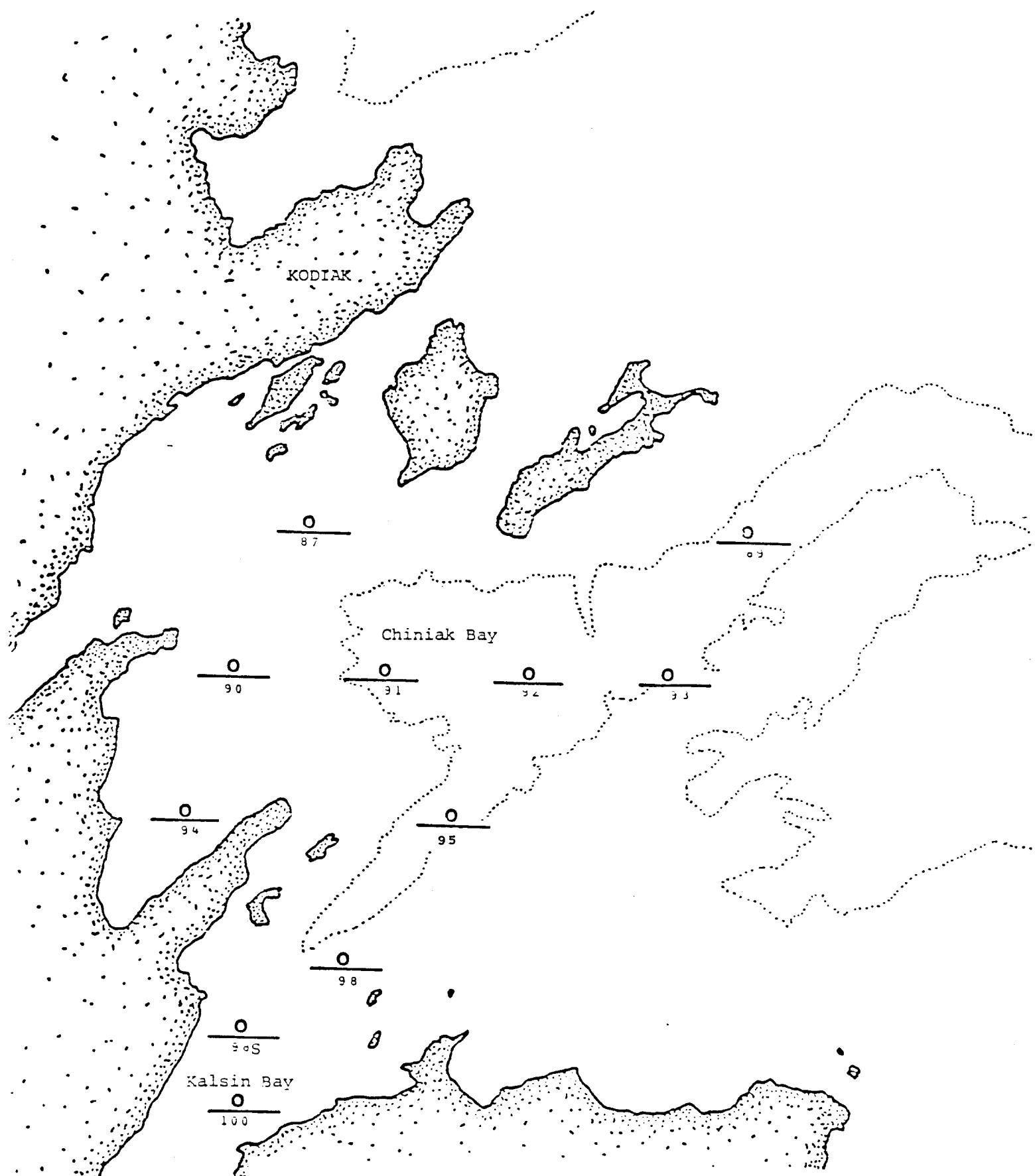


Figure 33k. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1983).

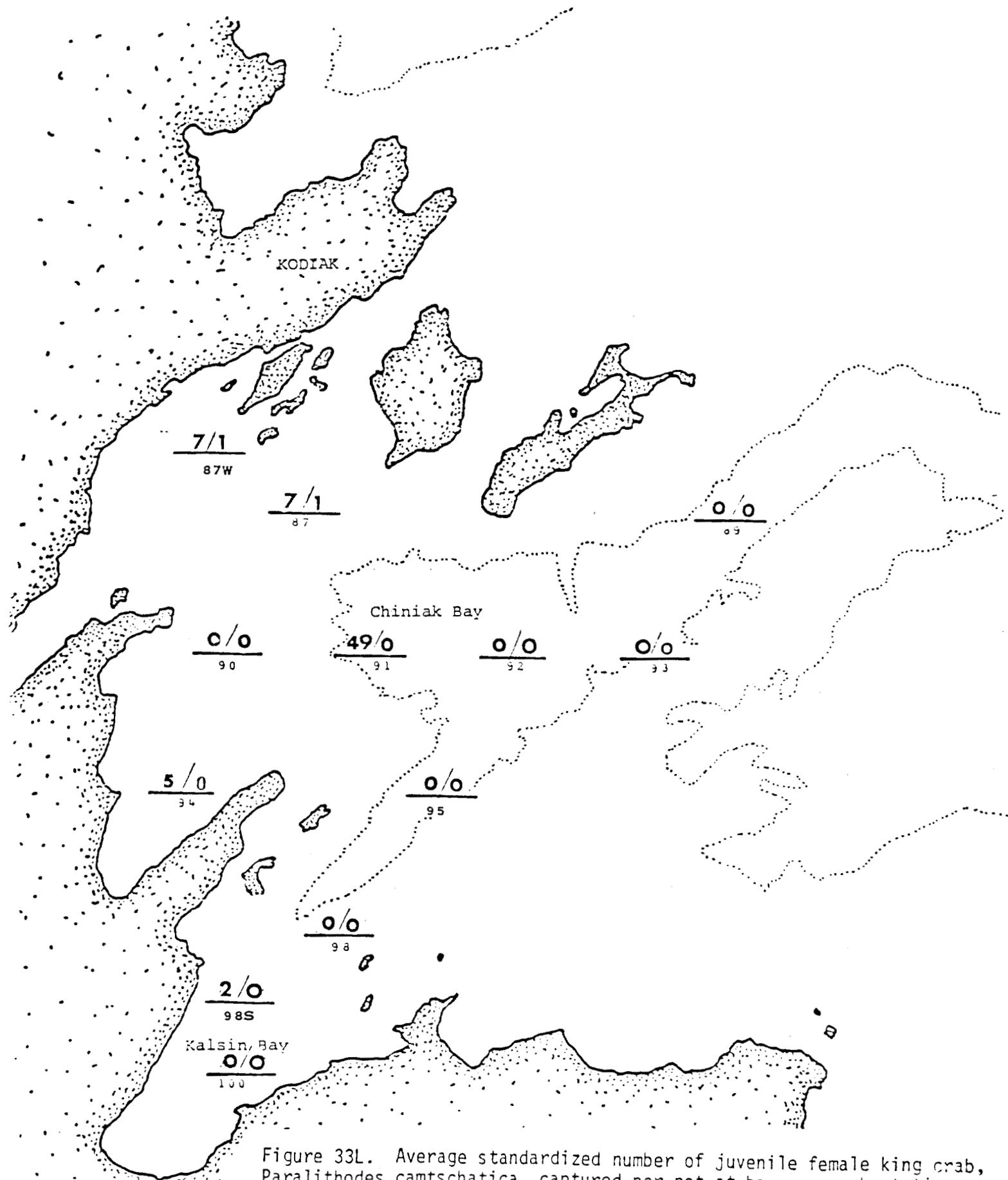


Figure 33L. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Chiniak Bay, Kodiak Island (1984).

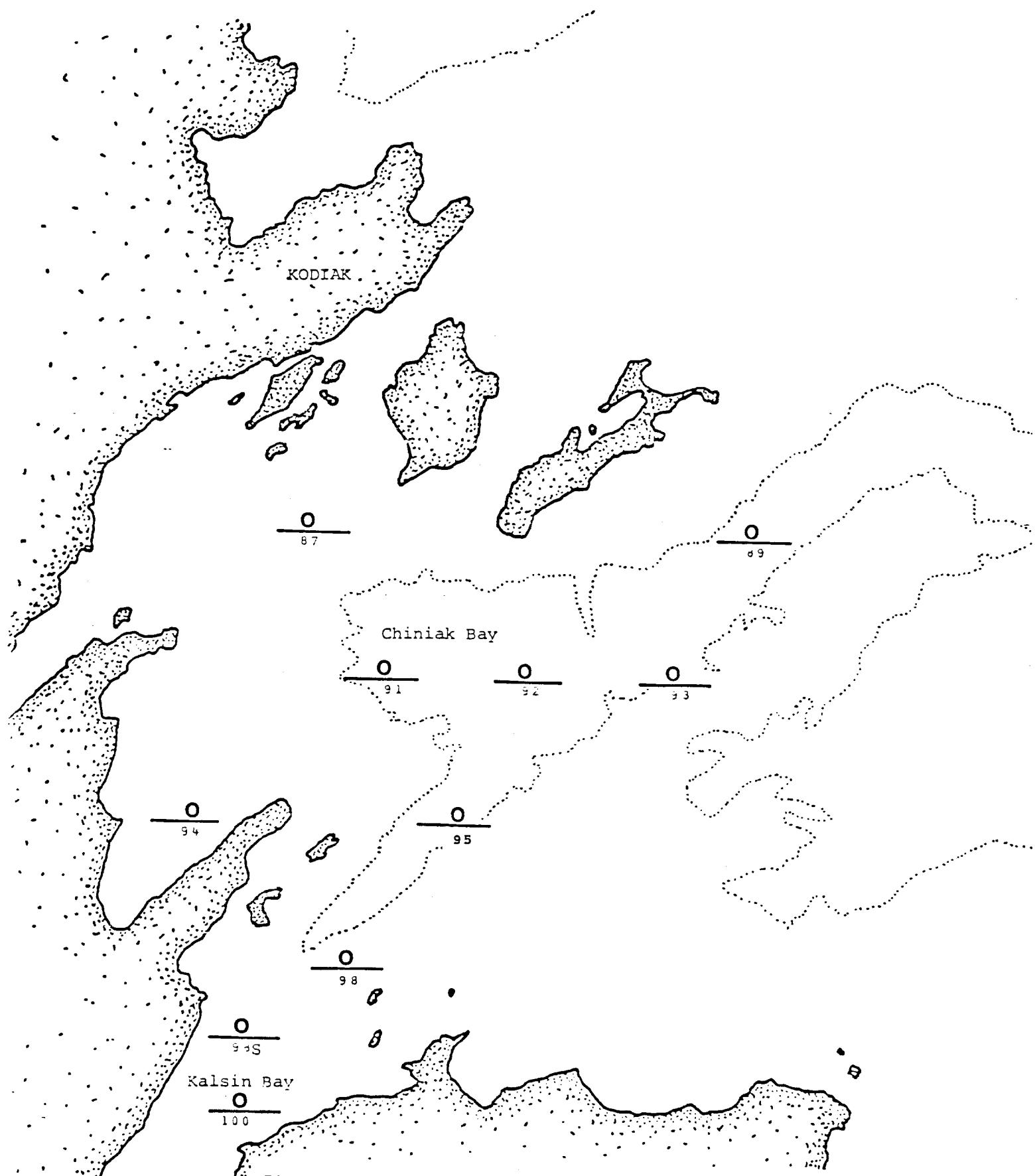


Figure 33m. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research staitons at Chiniak Bay, Kodiak Island (1985).

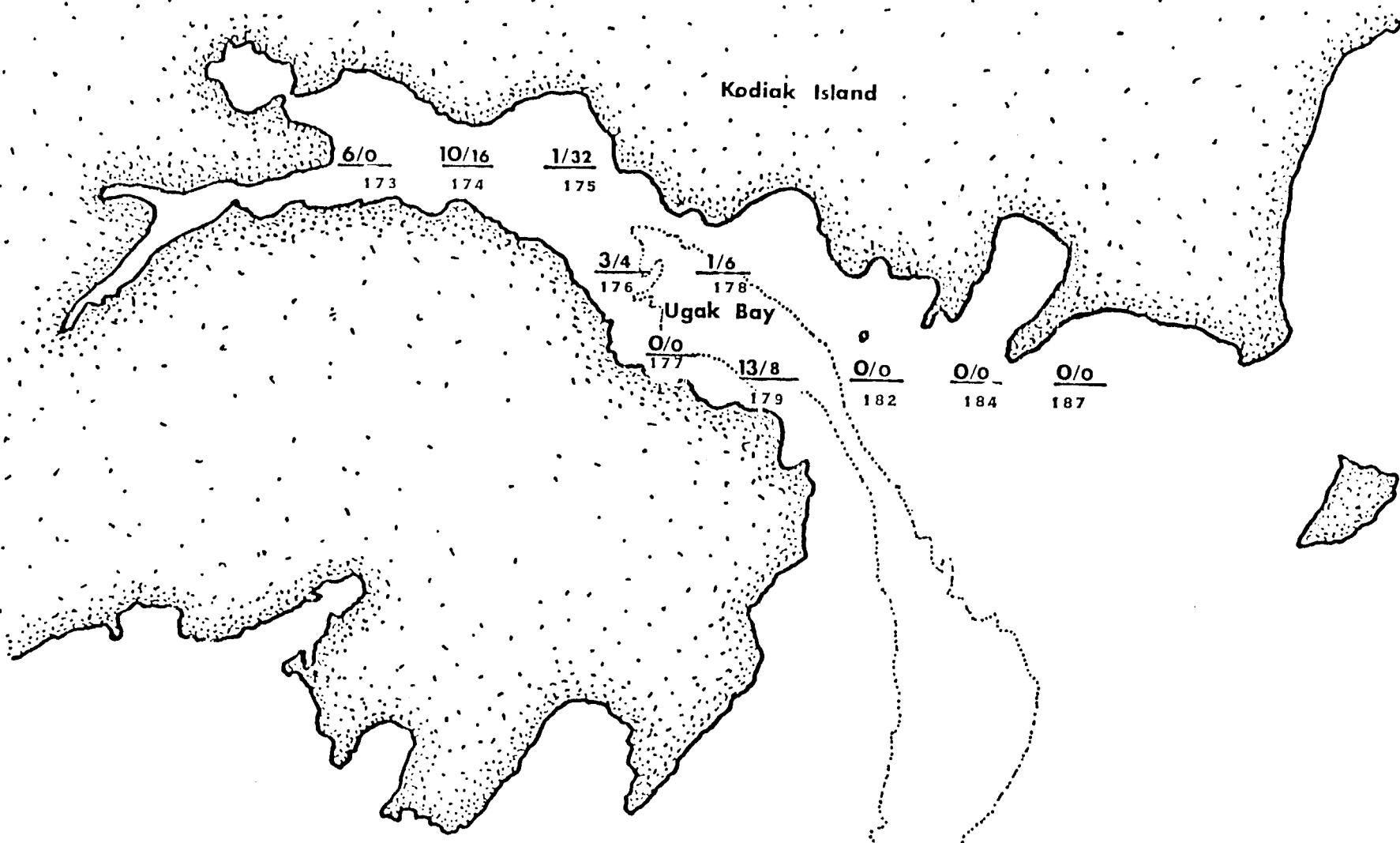


Figure 34a. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Ugak Bay, Kodiak Island (1979).

Presented as: Legal males/Adult females

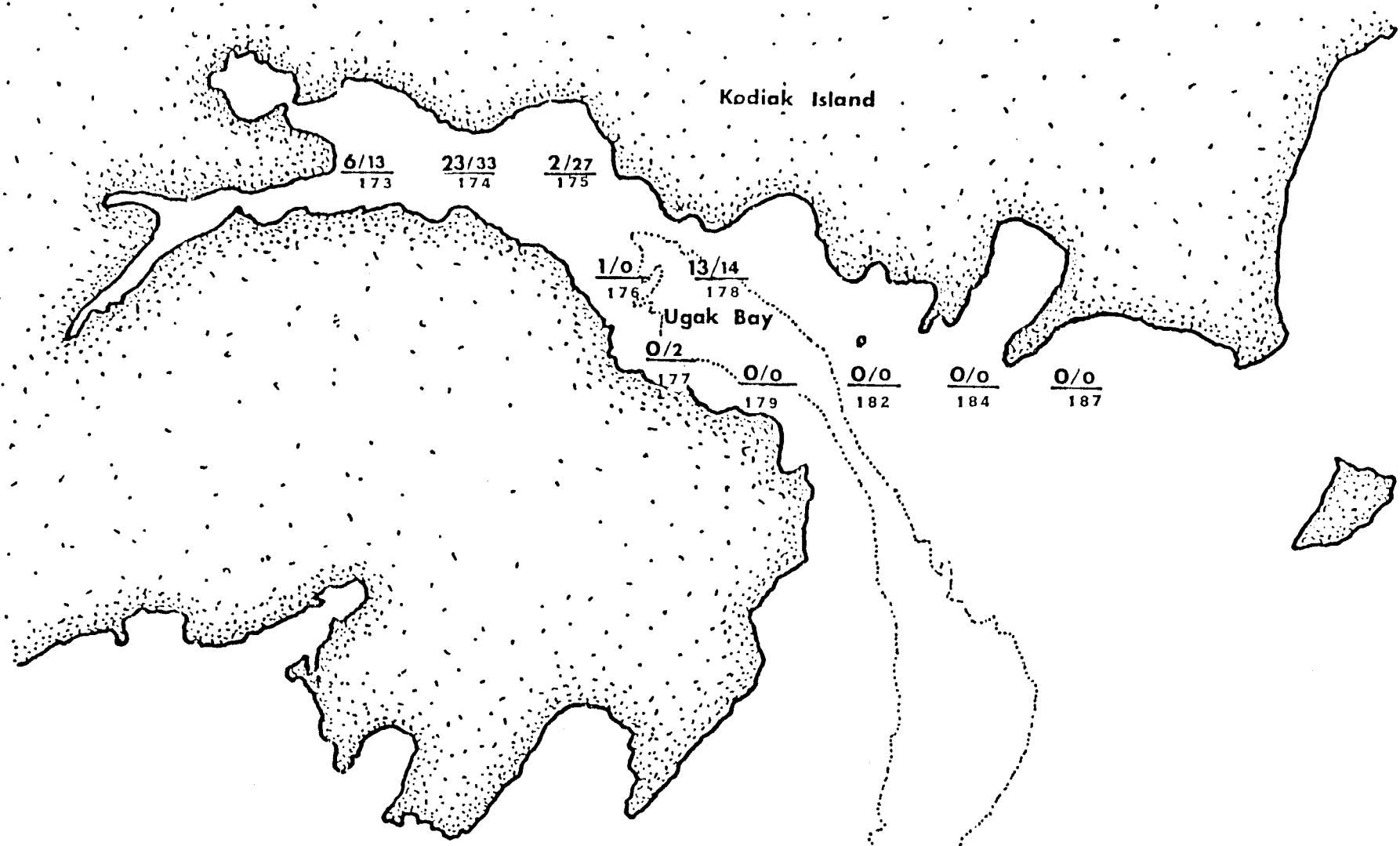


Figure 34b. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Ugak Bay, Kodiak Island (1980).

Presented as: Legal males/Adult females

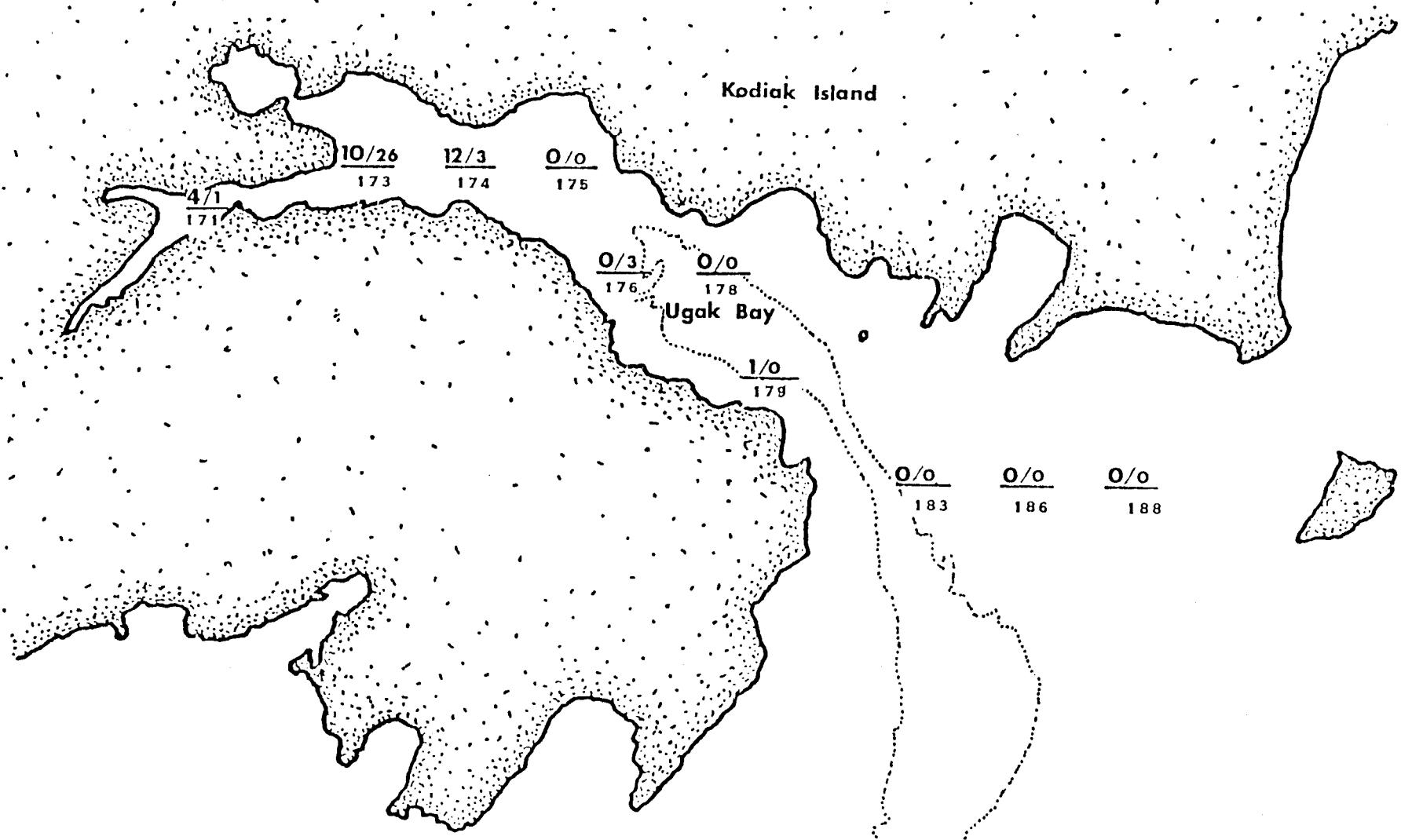


Figure 34c. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Ugak Bay, Kodiak Island (1981).

Presented as: Legal males/Adult females

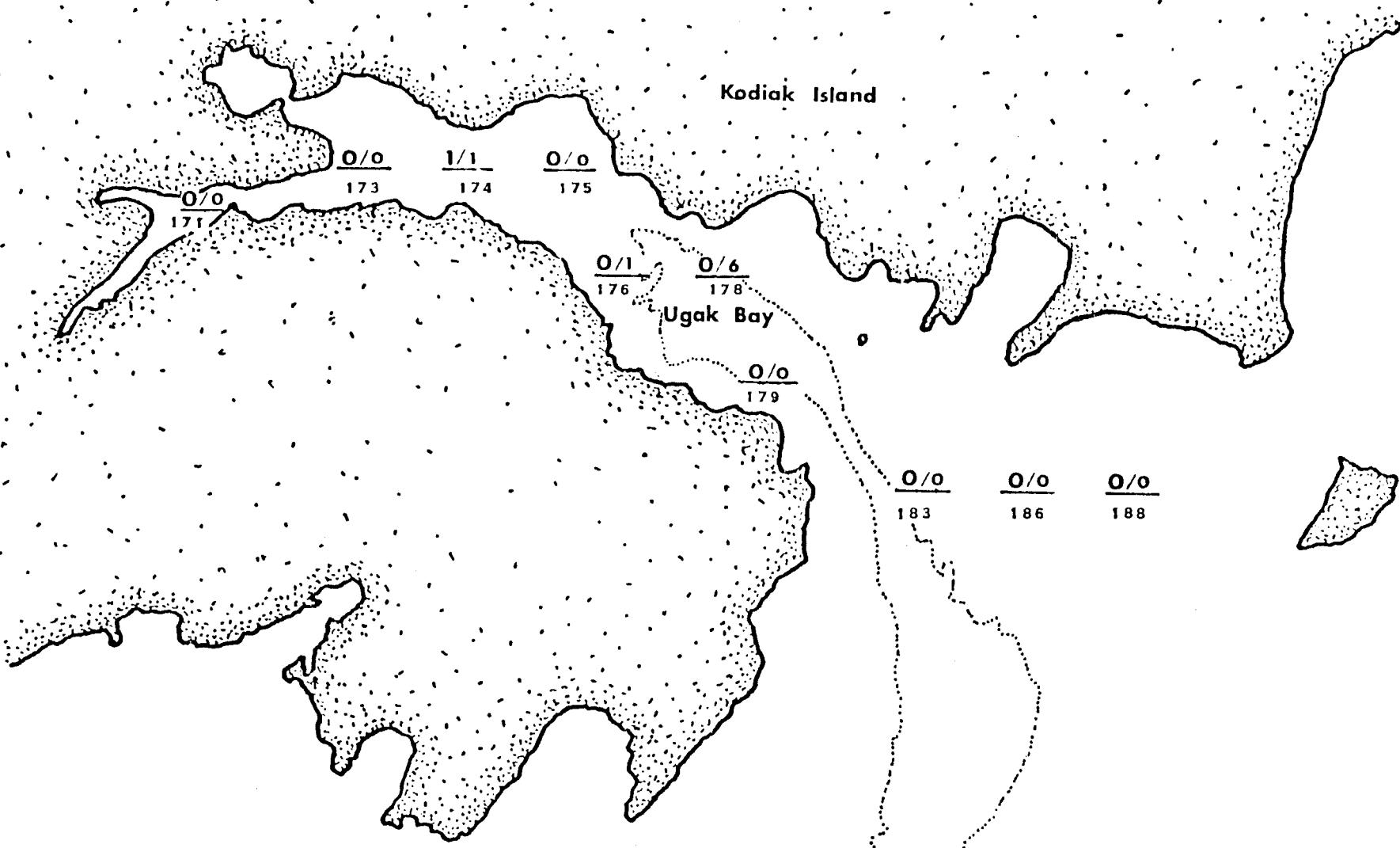
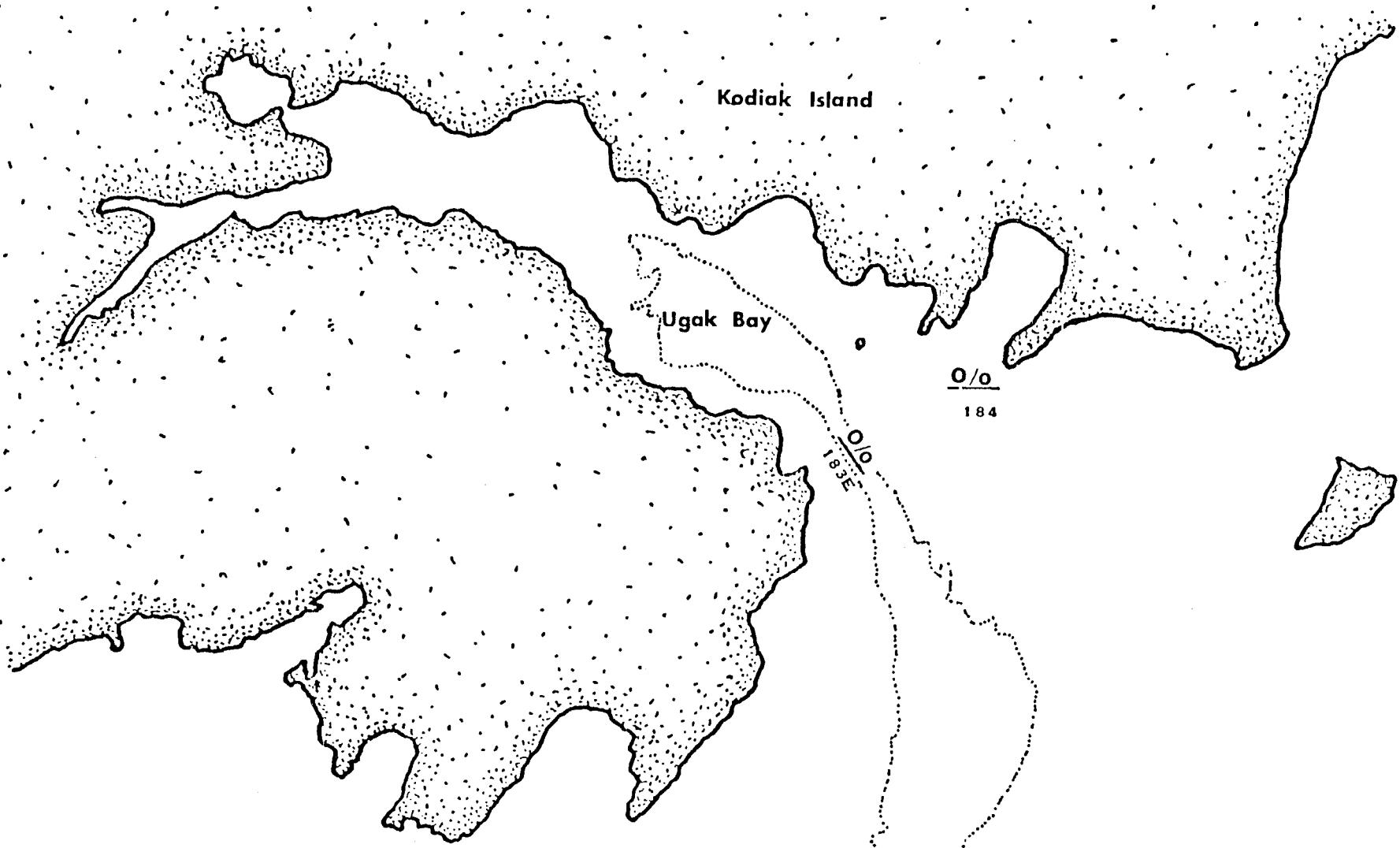


Figure 34d. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Ugak Bay, Kodiak Island (1982).

Presented as: Legal males/Adult females



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Figure 34e. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Ugak Bay, Kodiak Island (1983).

Presented as: Legal males/Adult females

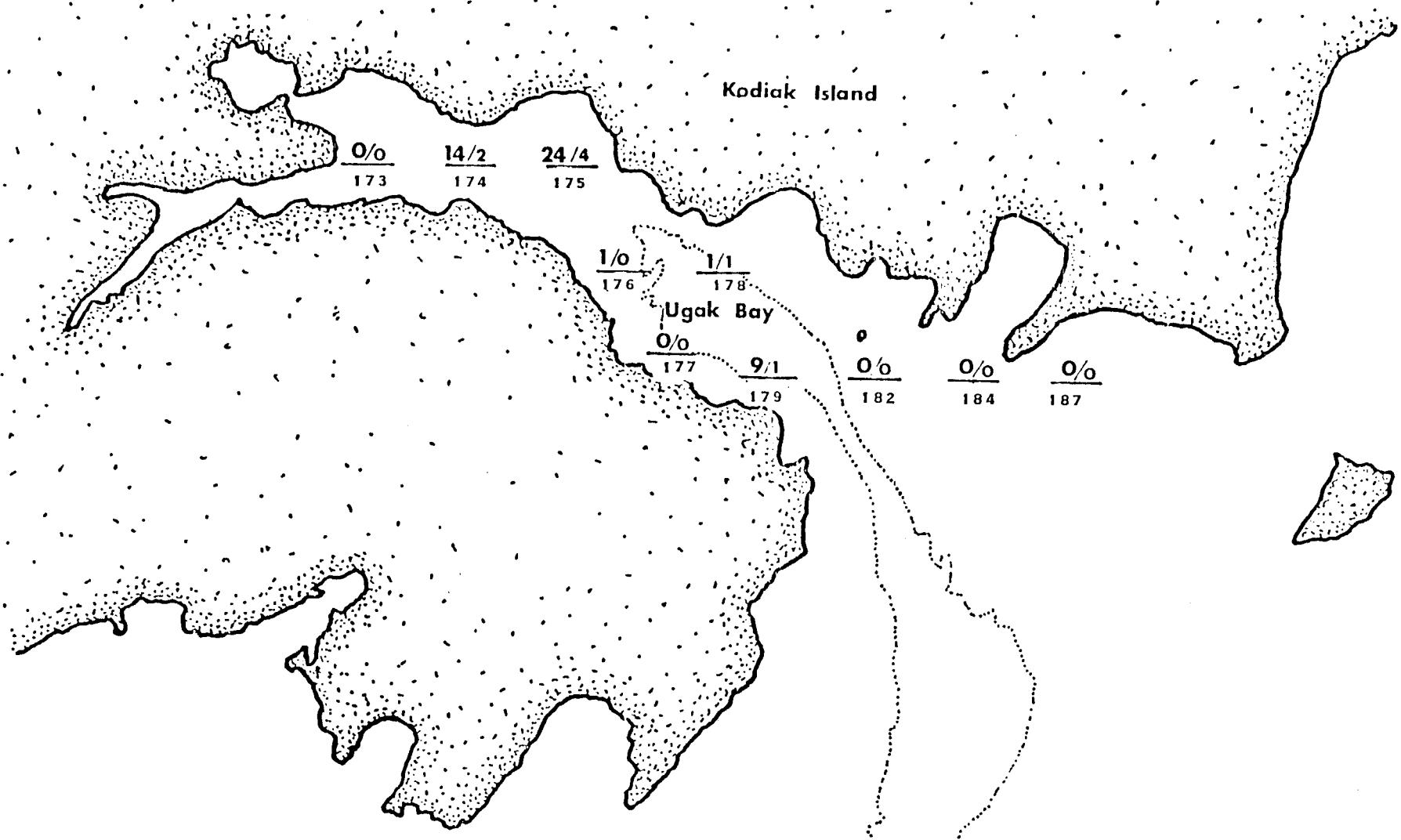


Figure 35a. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Ugak Bay, Kodiak Island (1979).

Presented as : 1's + 2's/3's + 4's

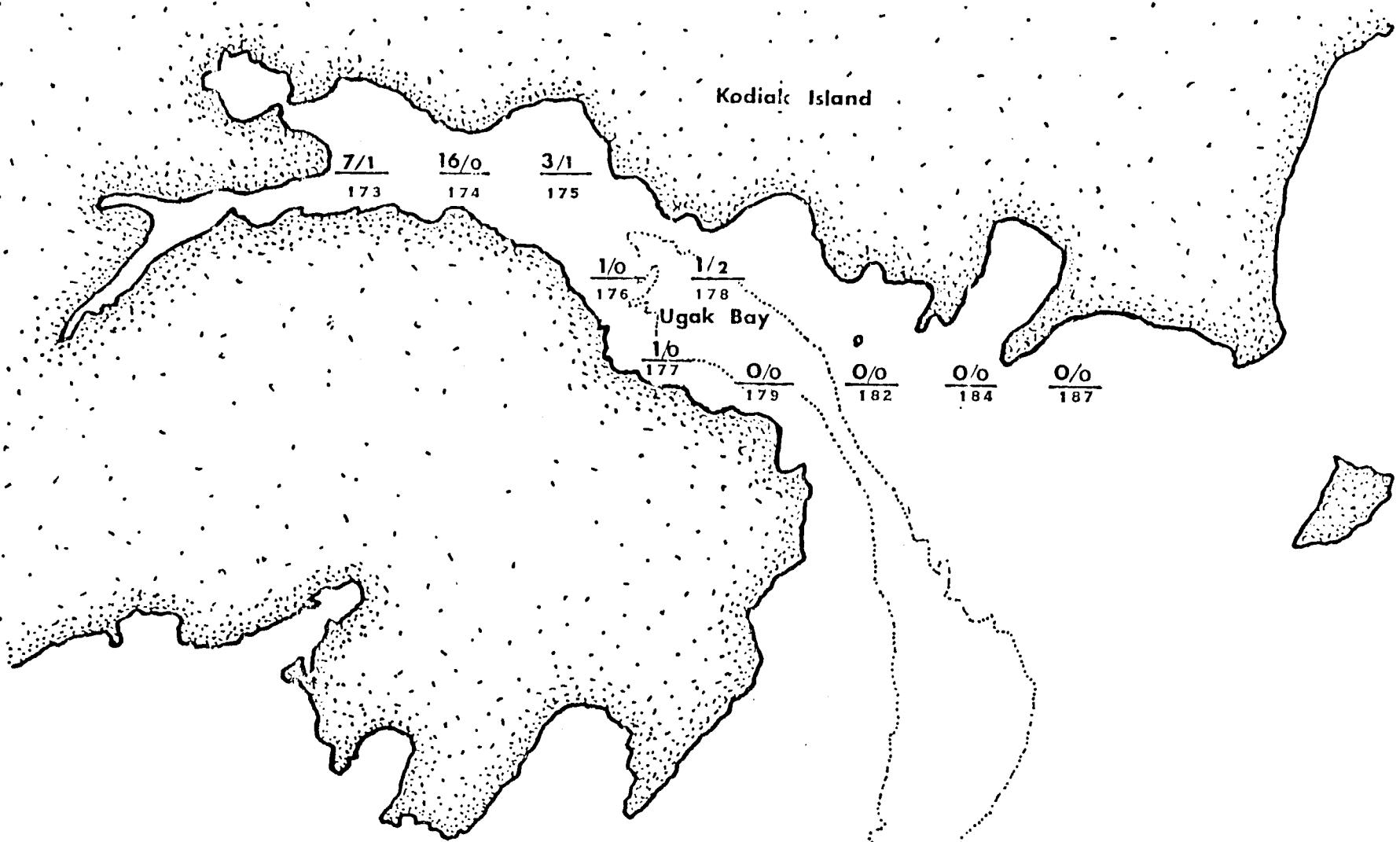


Figure 35b. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Ugak Bay, Kodiak Island (1980).

Presented as : 1's + 2's/3's + 4's

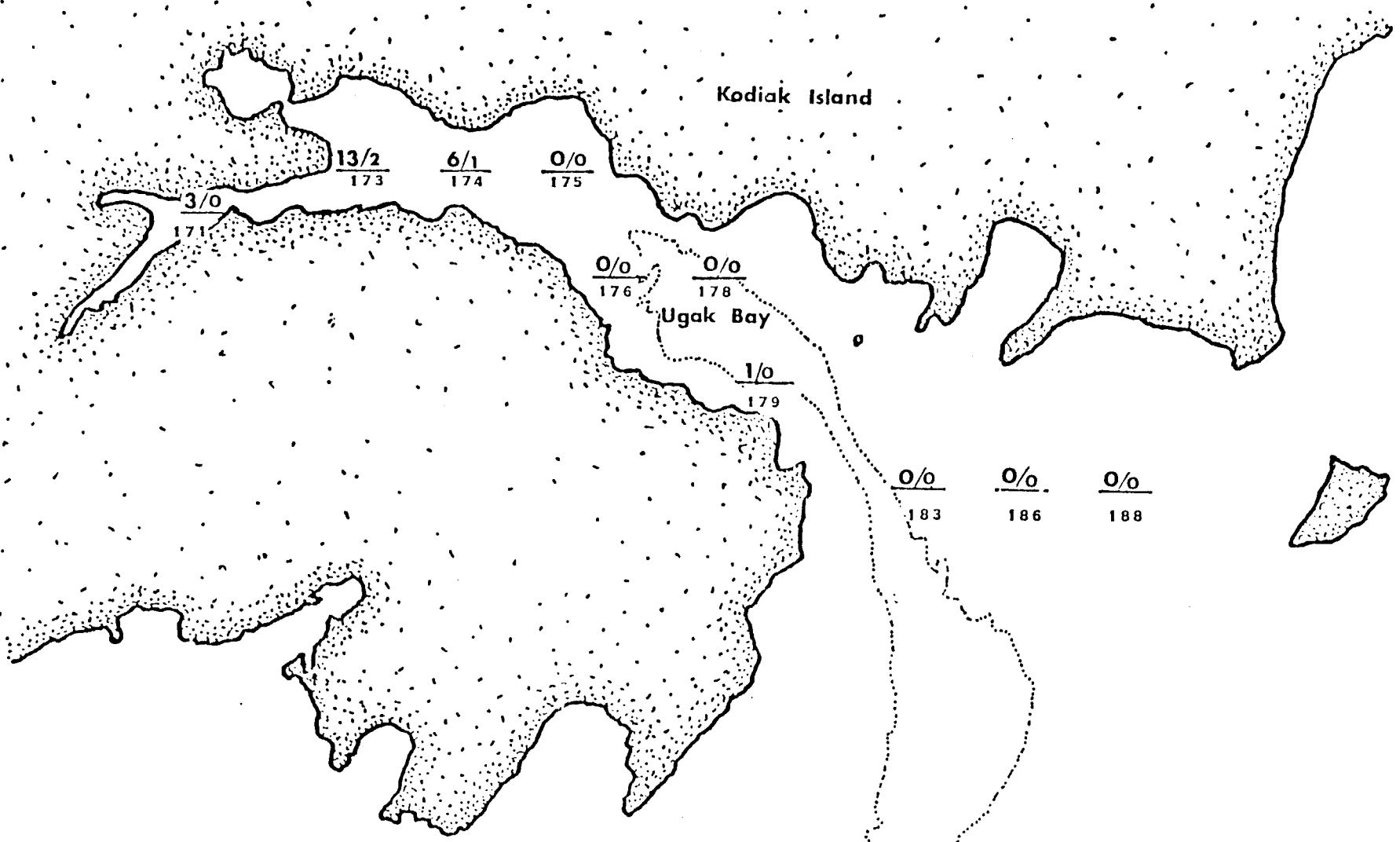


Figure 35c. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Ugak Bay, Kodiak Island (1981).

Presented as : 1's + 2's/3's + 4's

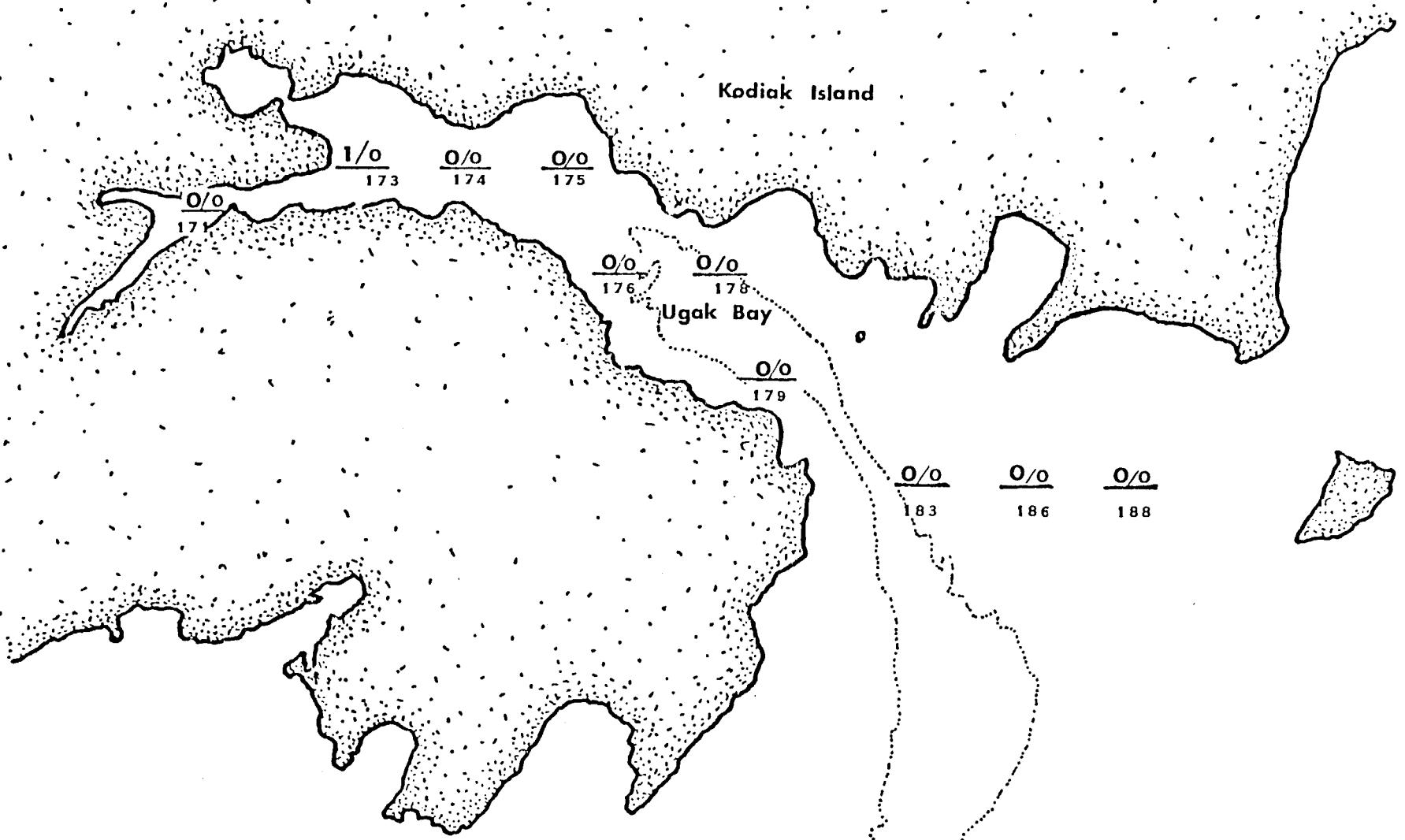


Figure 35d. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Ugak Bay, Kodiak Island (1982).

Presented as : 1's + 2's/3's + 4's

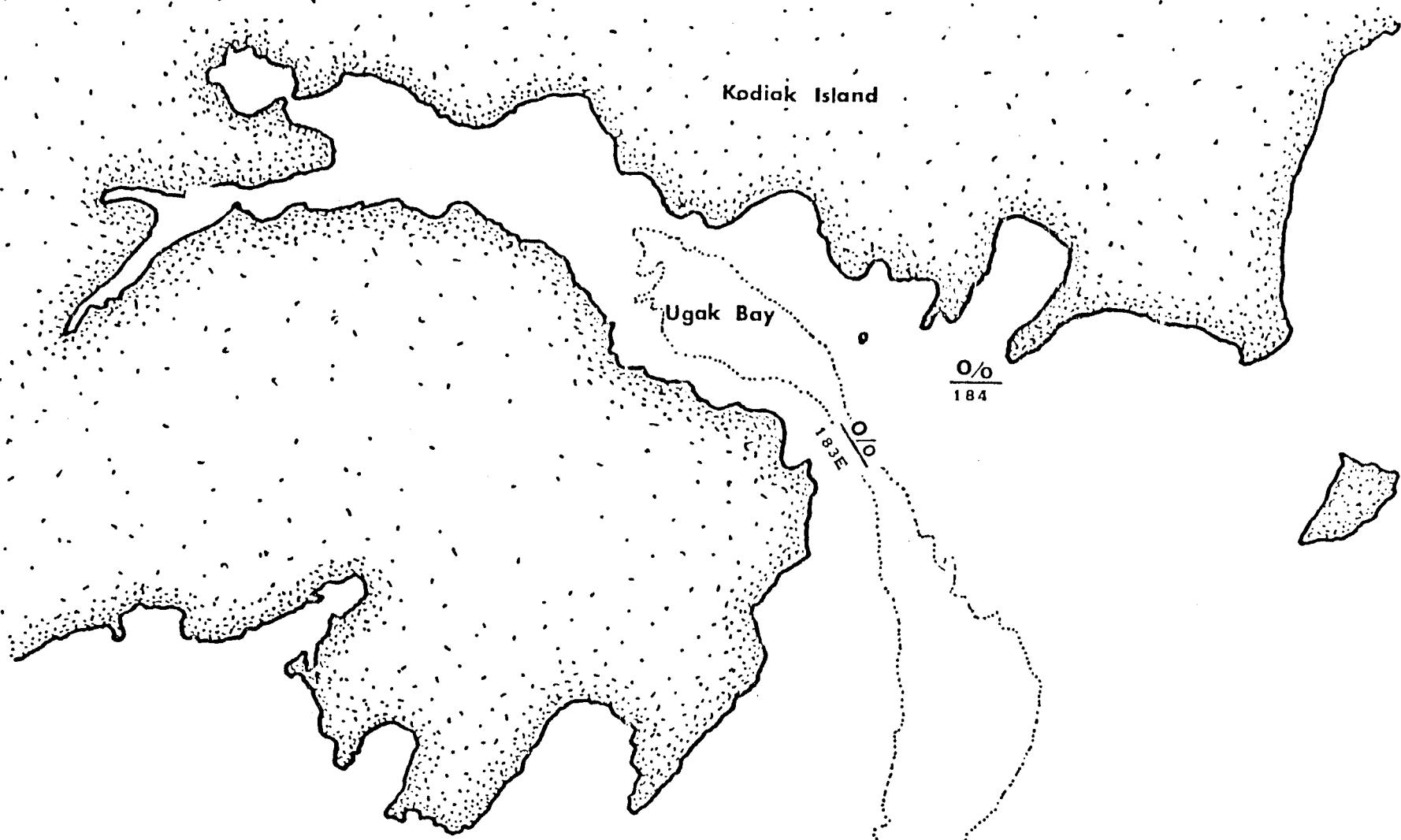


Figure 35e. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Ugak Bay, Kodiak Island (1983).

Presented as : 1's + 2's/3's + 4's

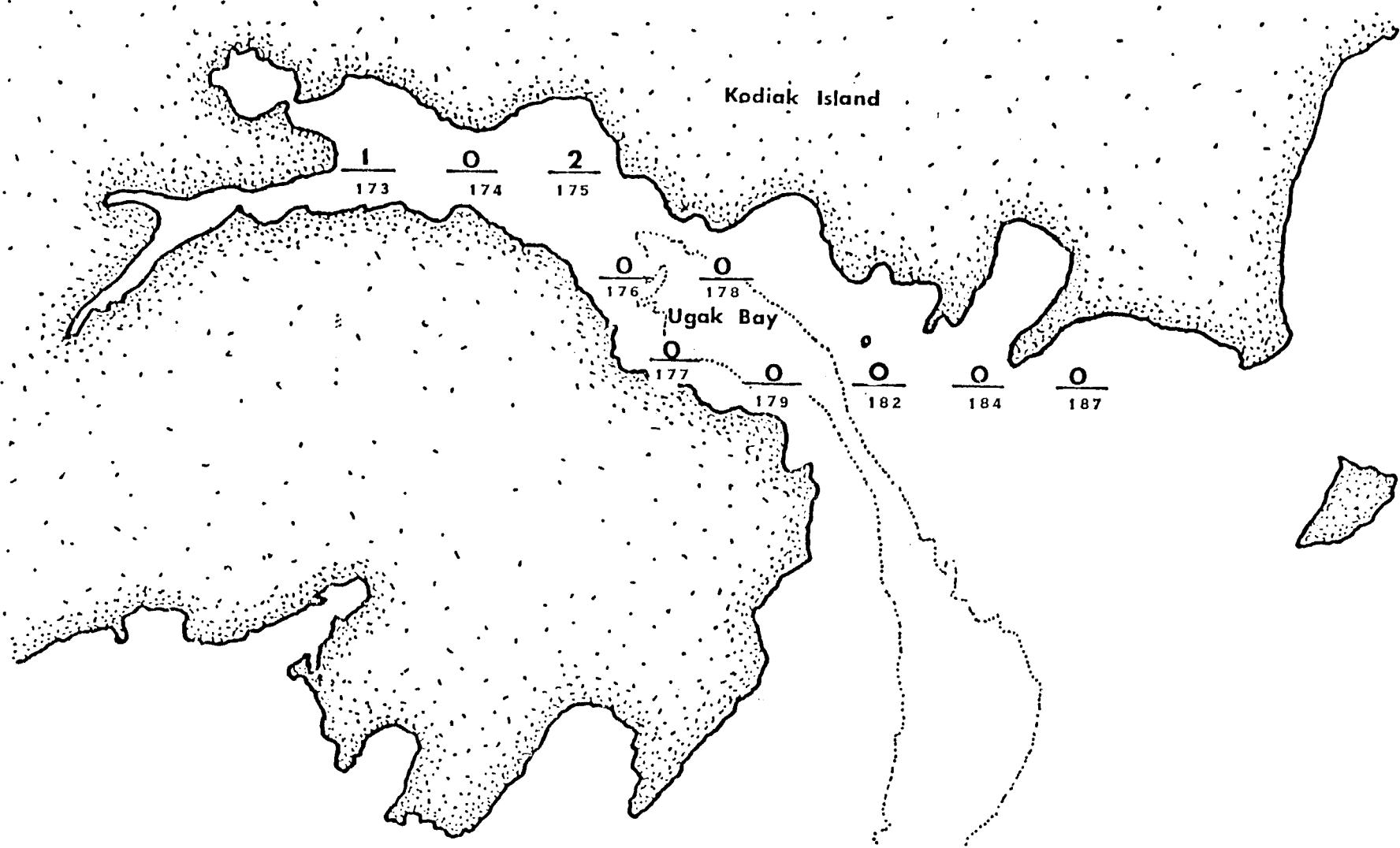


Figure 36a. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Ugak Bay, Kodiak Island (1979).

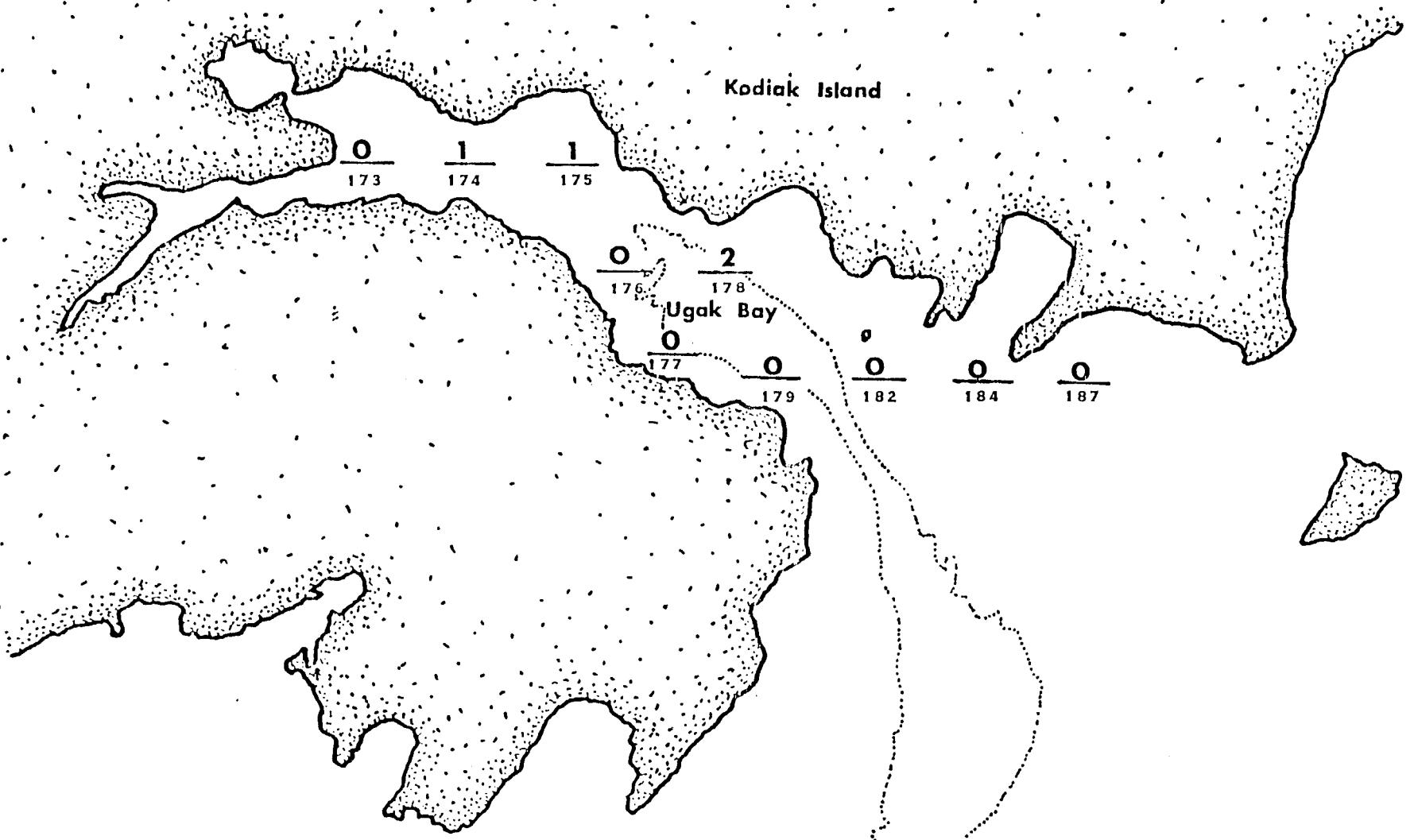


Figure 36b. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Ugak Bay, Kodiak Island (1980).

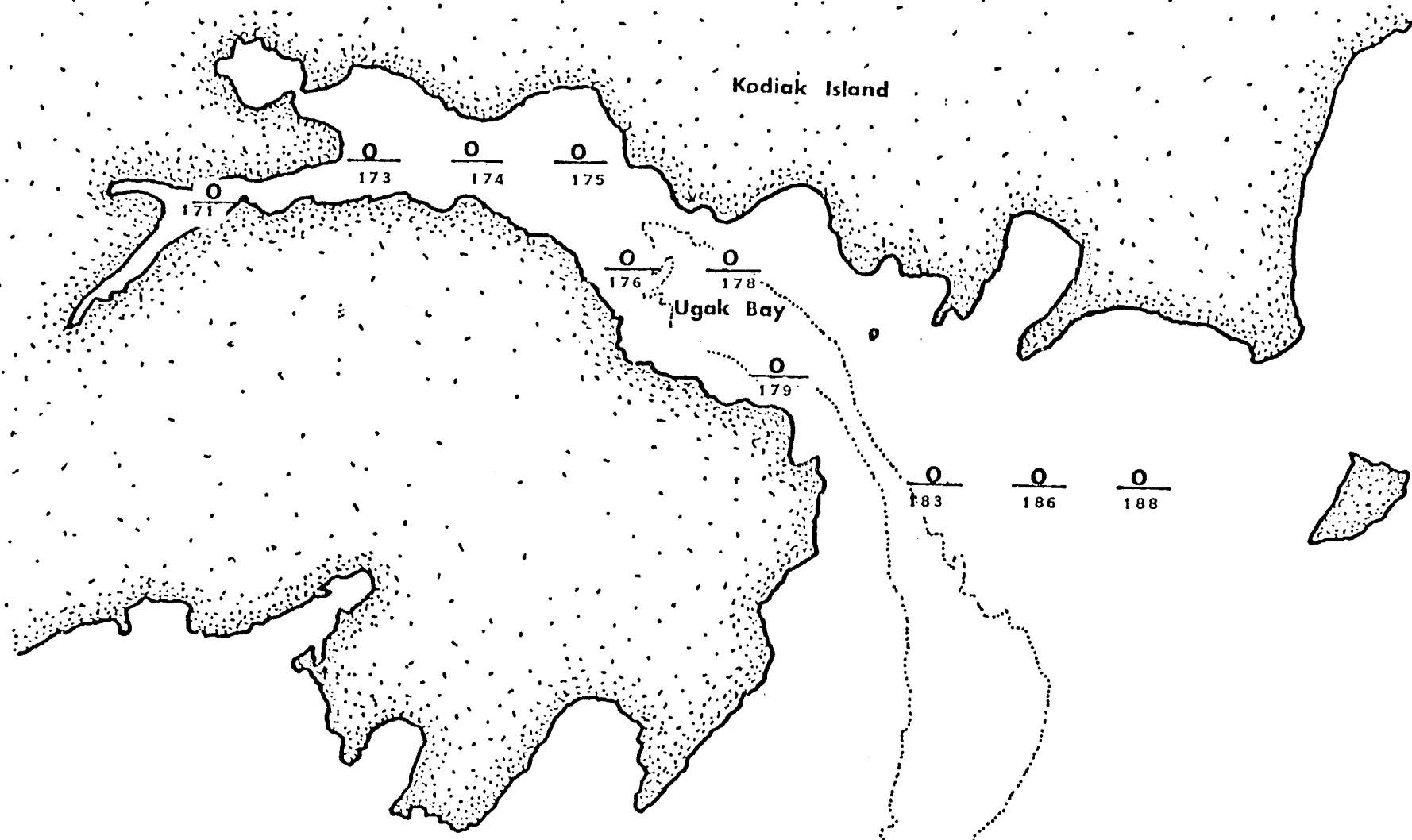


Figure 36c. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Ugak Bay, Kodiak Island (1981).

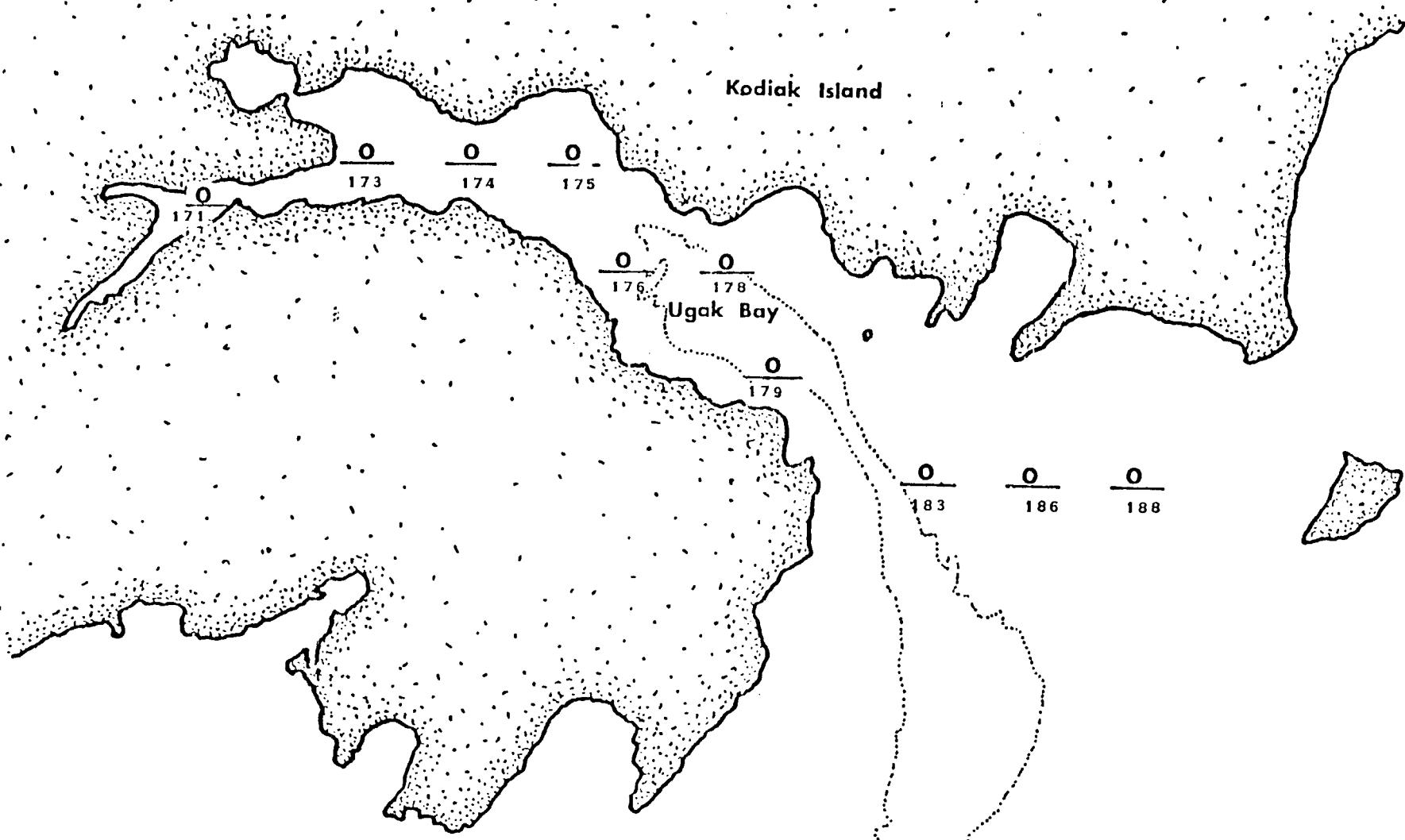


Figure 36d. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Ugak Bay, Kodiak Island (1982).

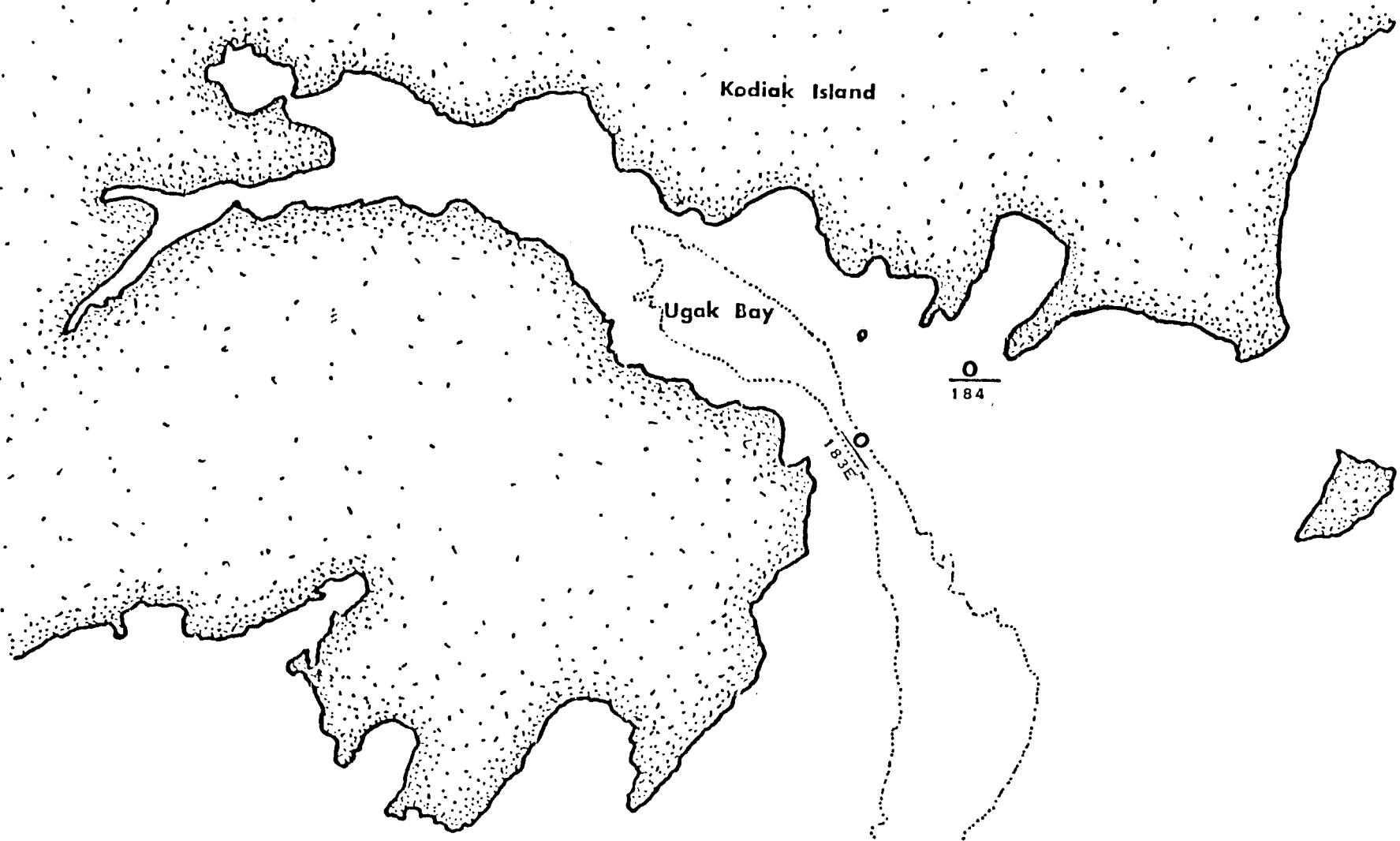


Figure 36e. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Ugak Bay, Kodiak Island (1983).

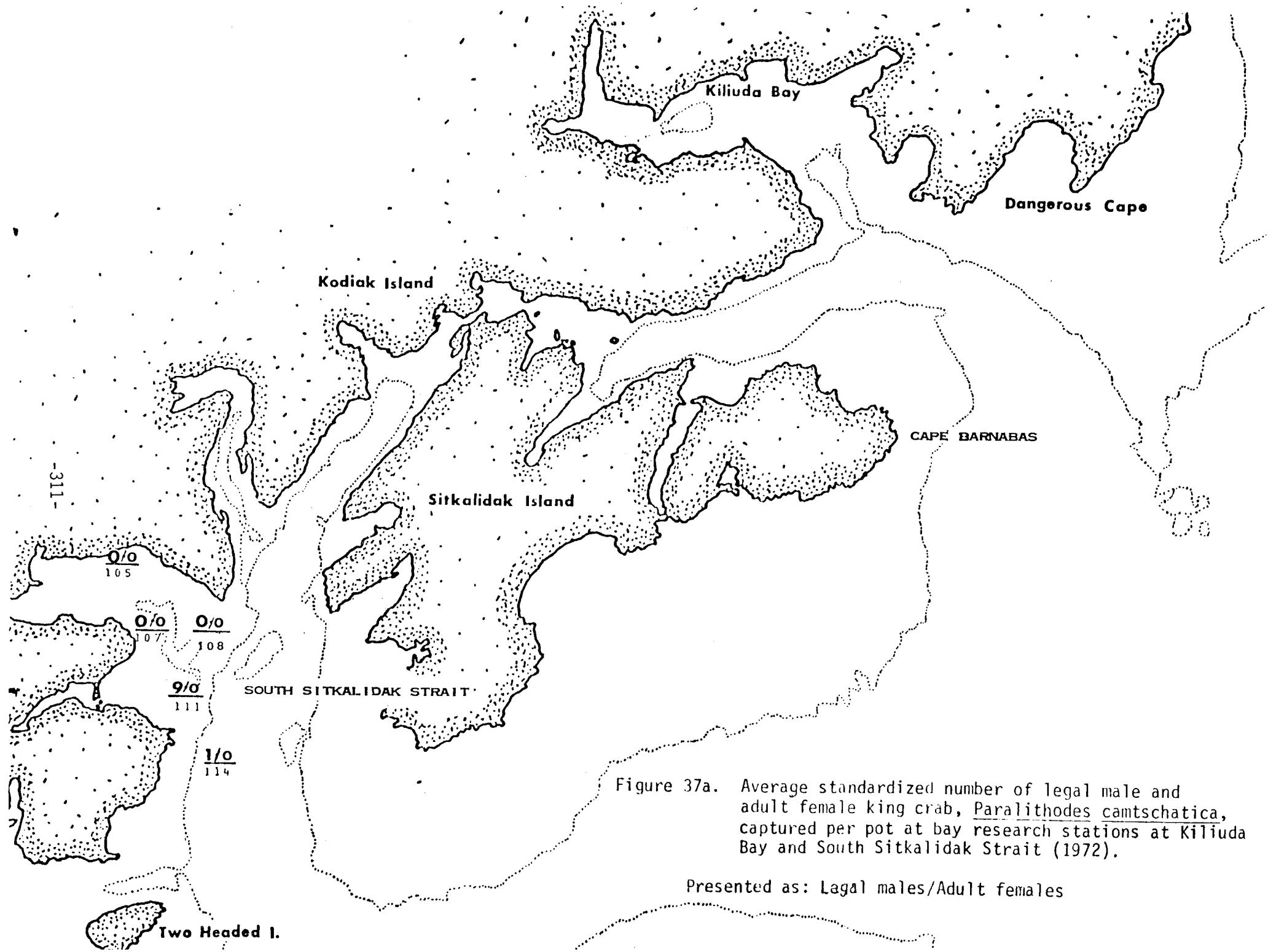


Figure 37a. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait (1972).

Presented as: Legal males/Adult females

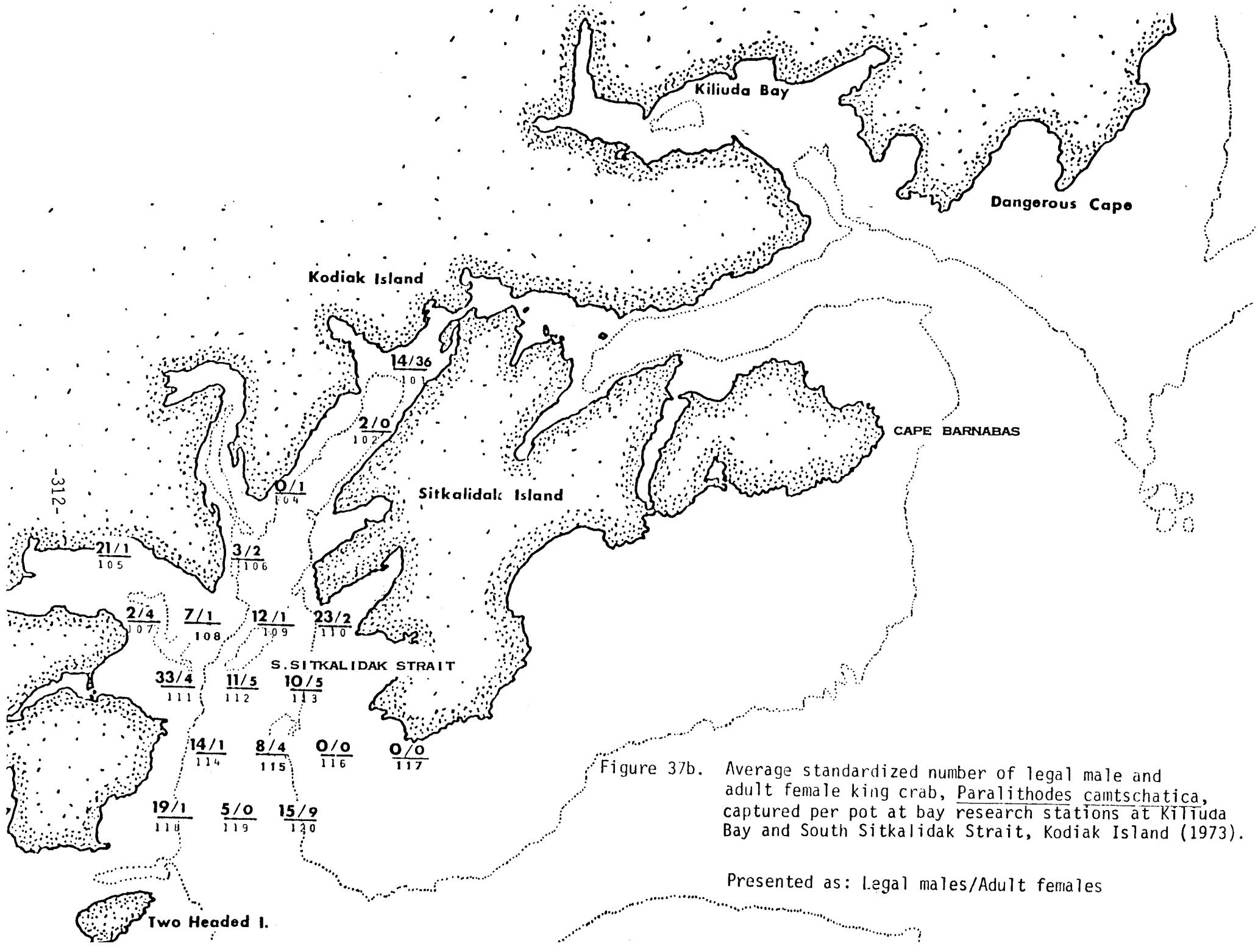


Figure 37b. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1973).

Presented as: Legal males/Adult females

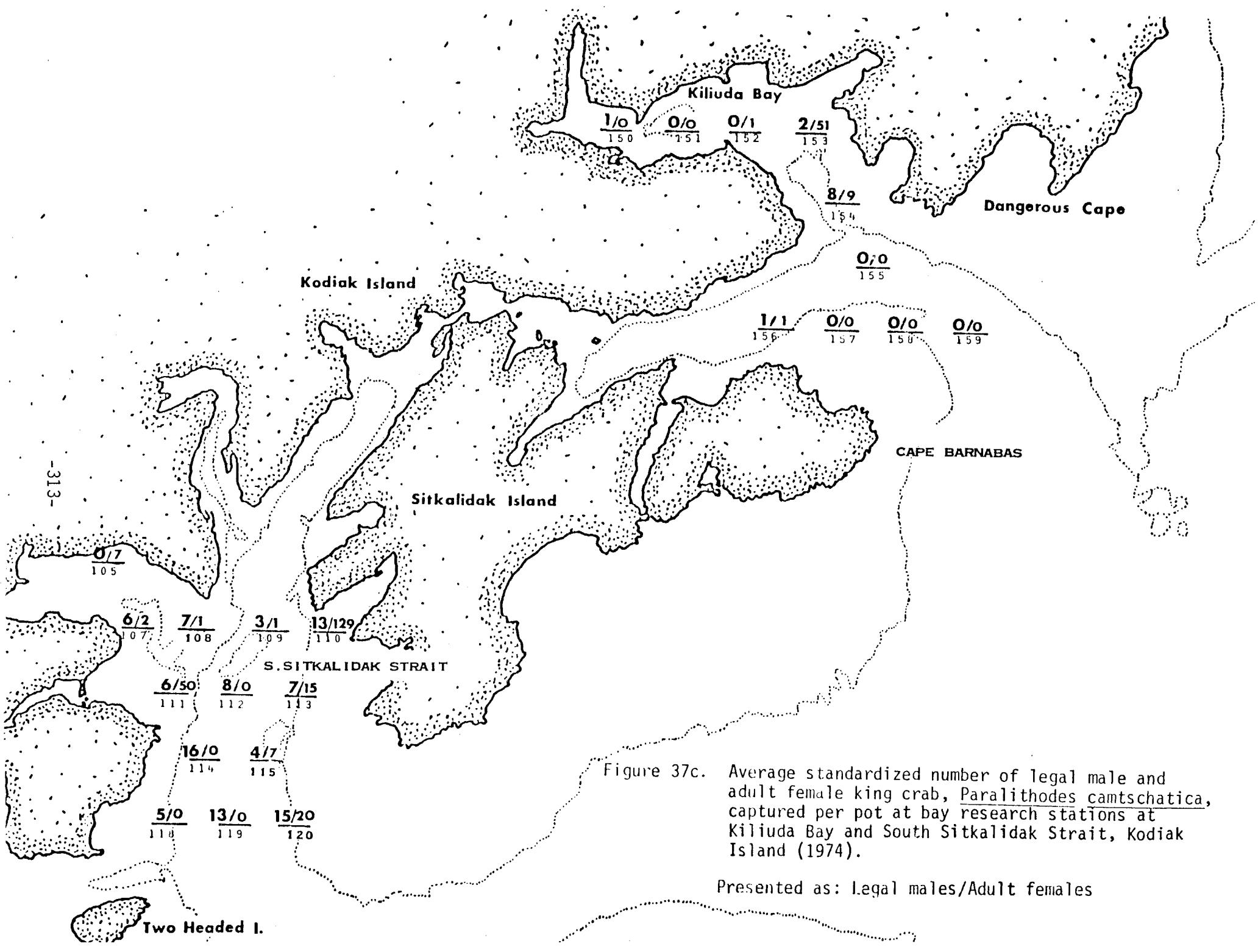


Figure 37c. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1974).

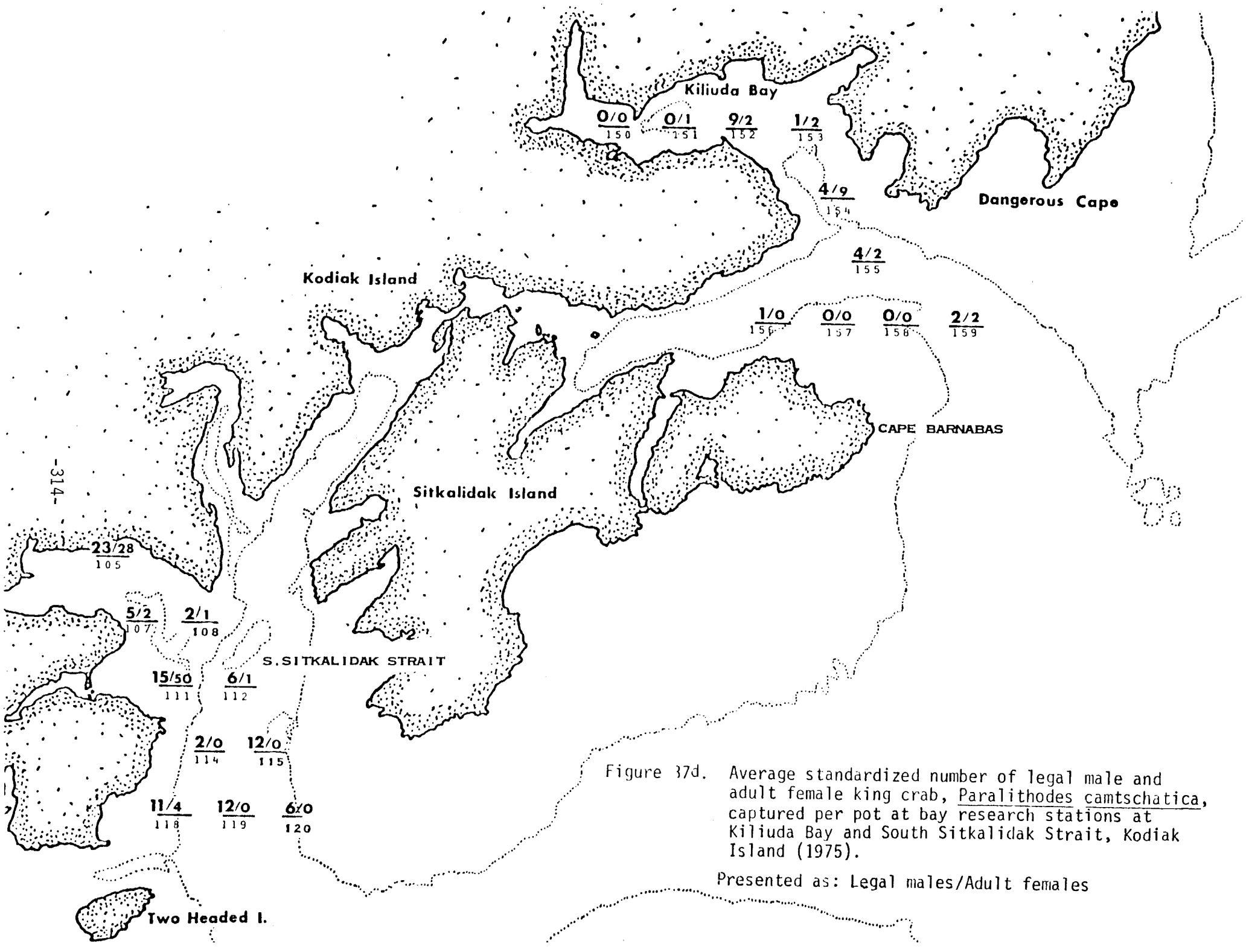


Figure 37d. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1975).

Presented as: Legal males/Adult females

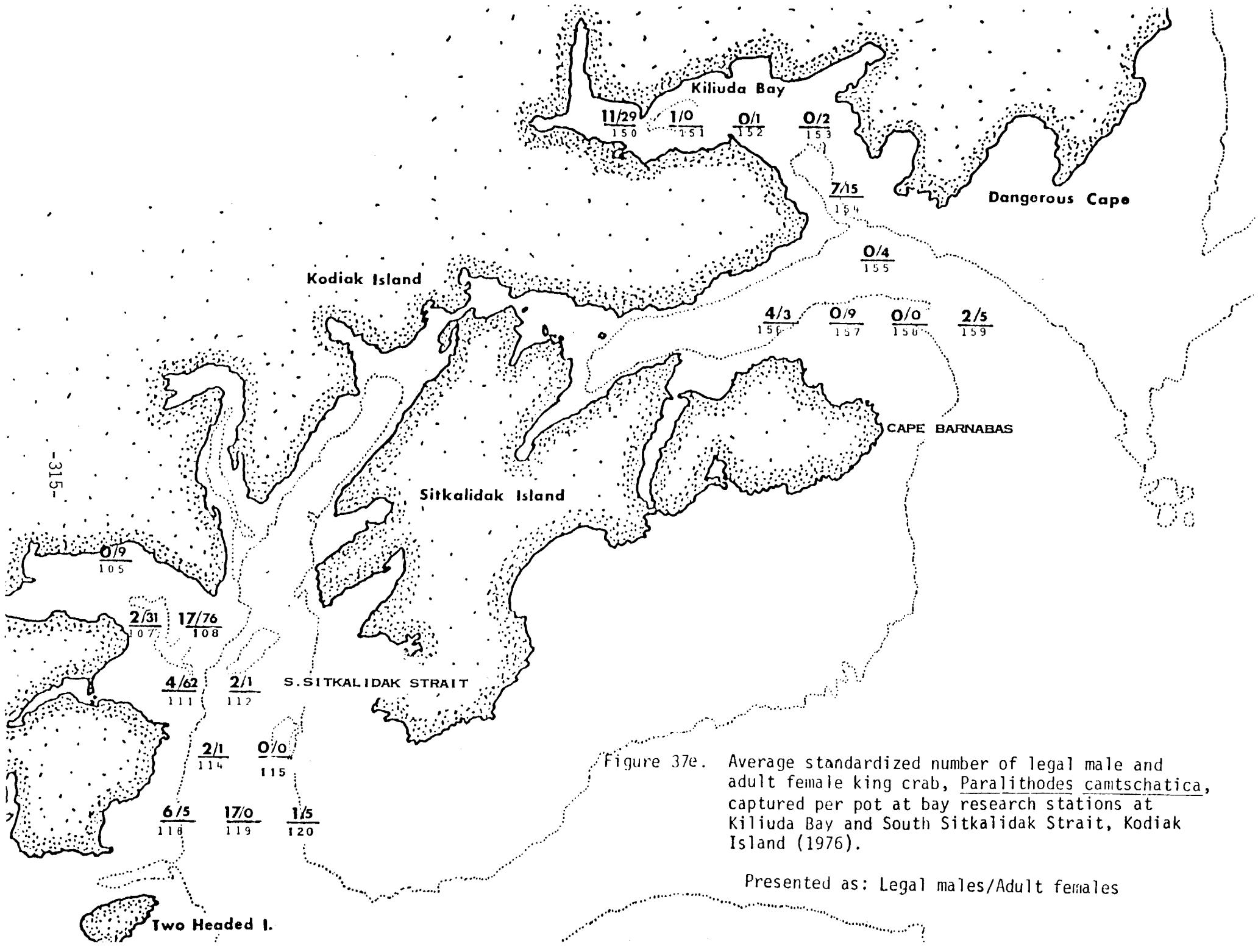
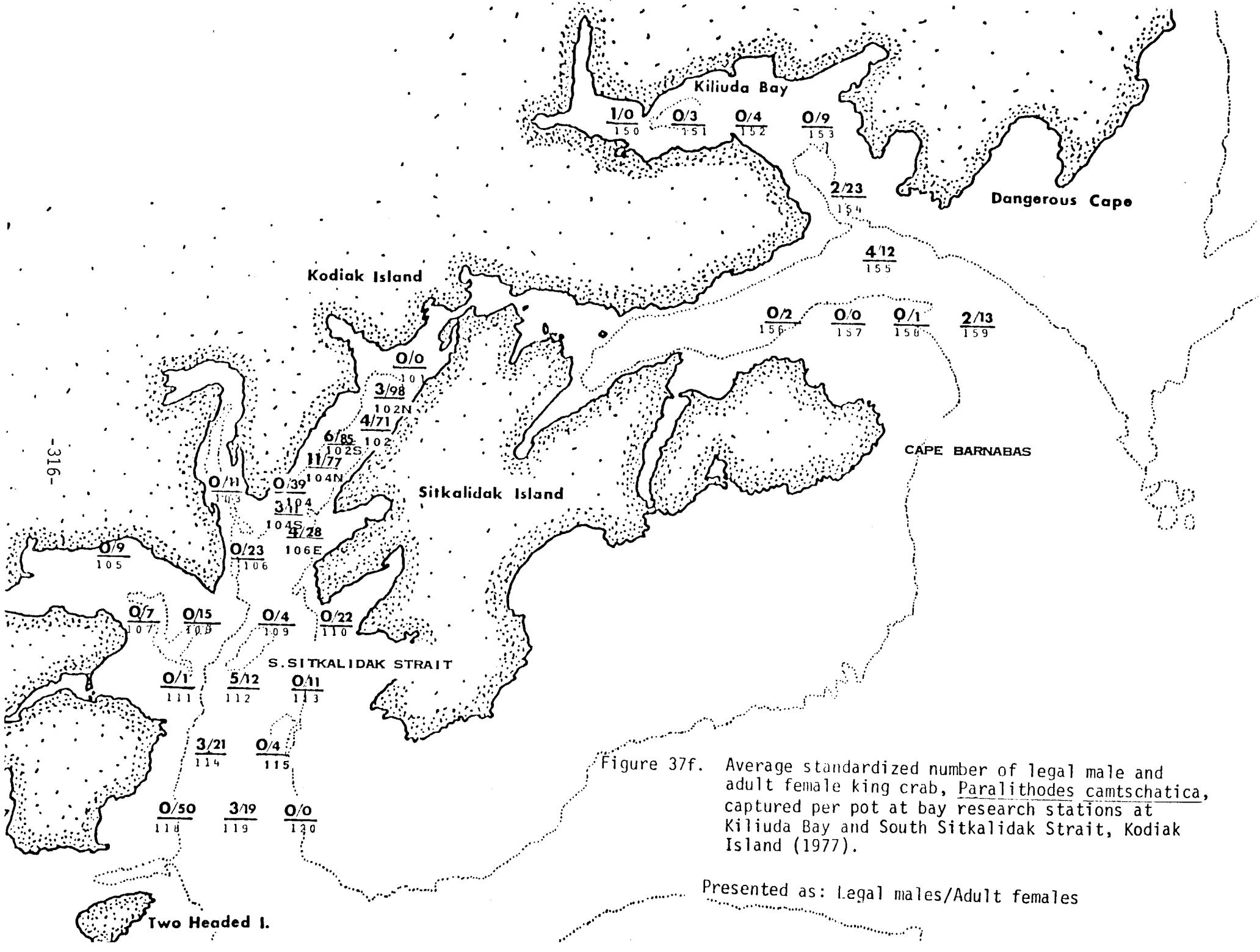


Figure 37e. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1976).

Presented as: Legal males/Adult females



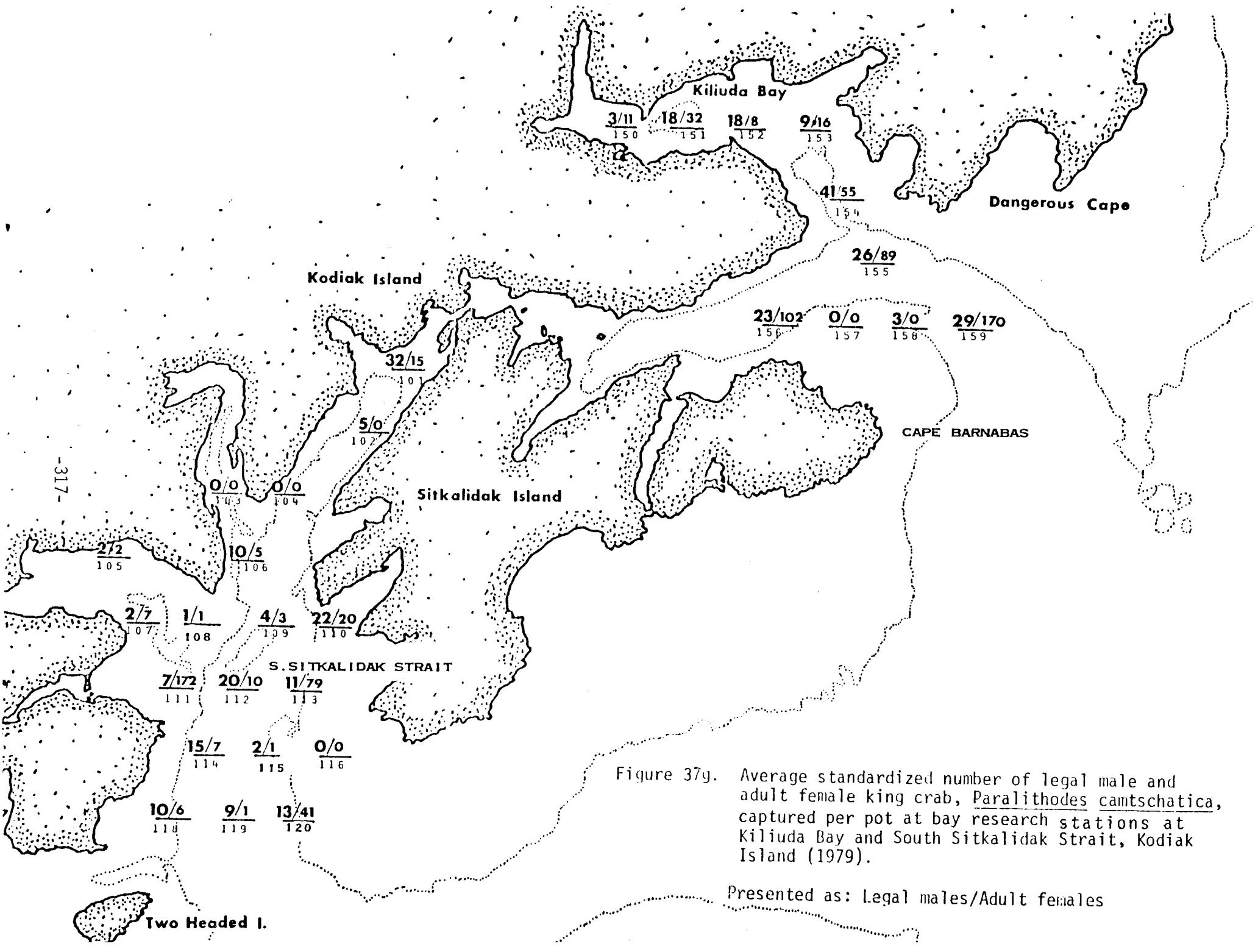


Figure 37g. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1979).

Presented as: Legal males/Adult females

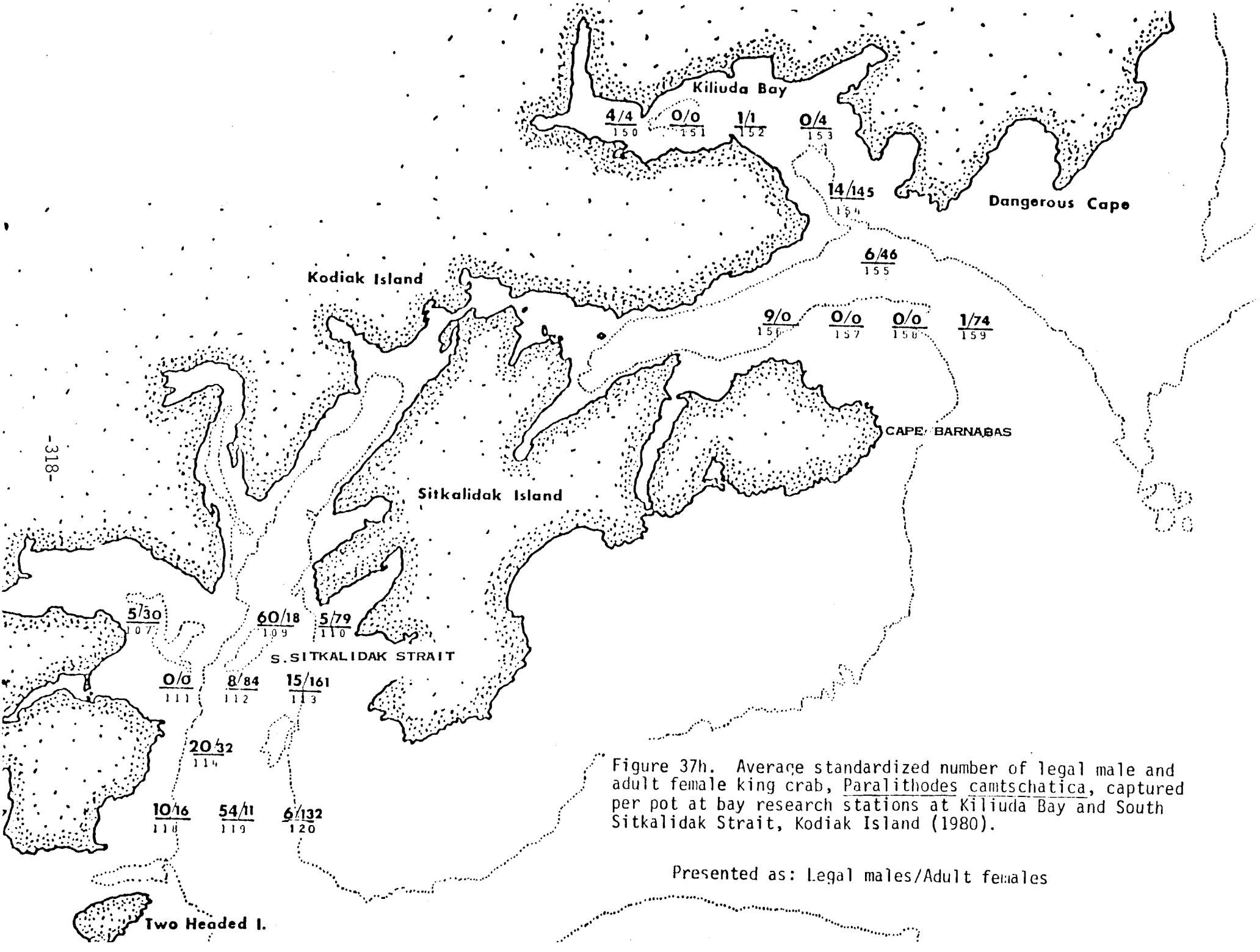


Figure 37h. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1980).

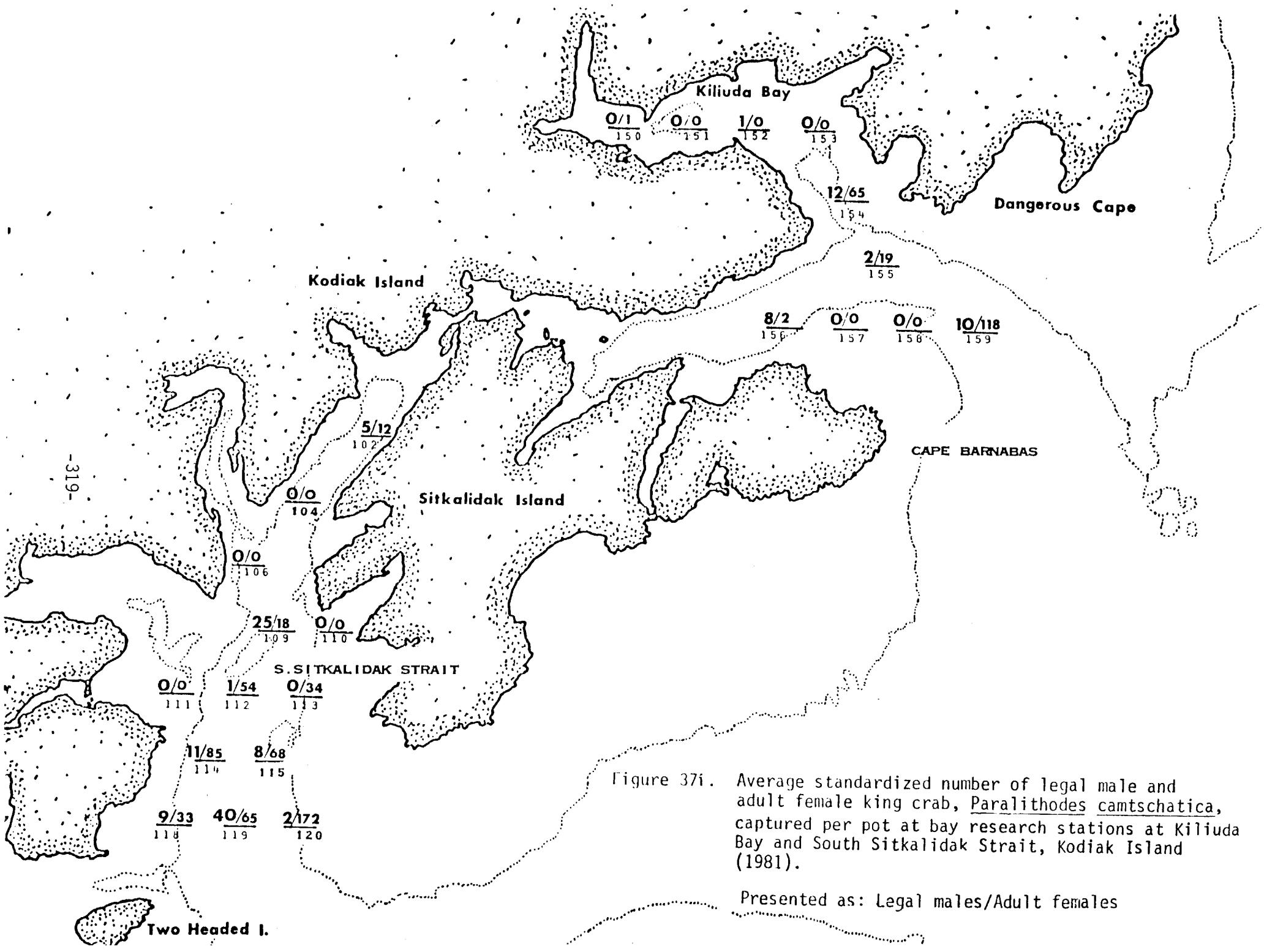


Figure 37i. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1981).

Presented as: Legal males/Adult females

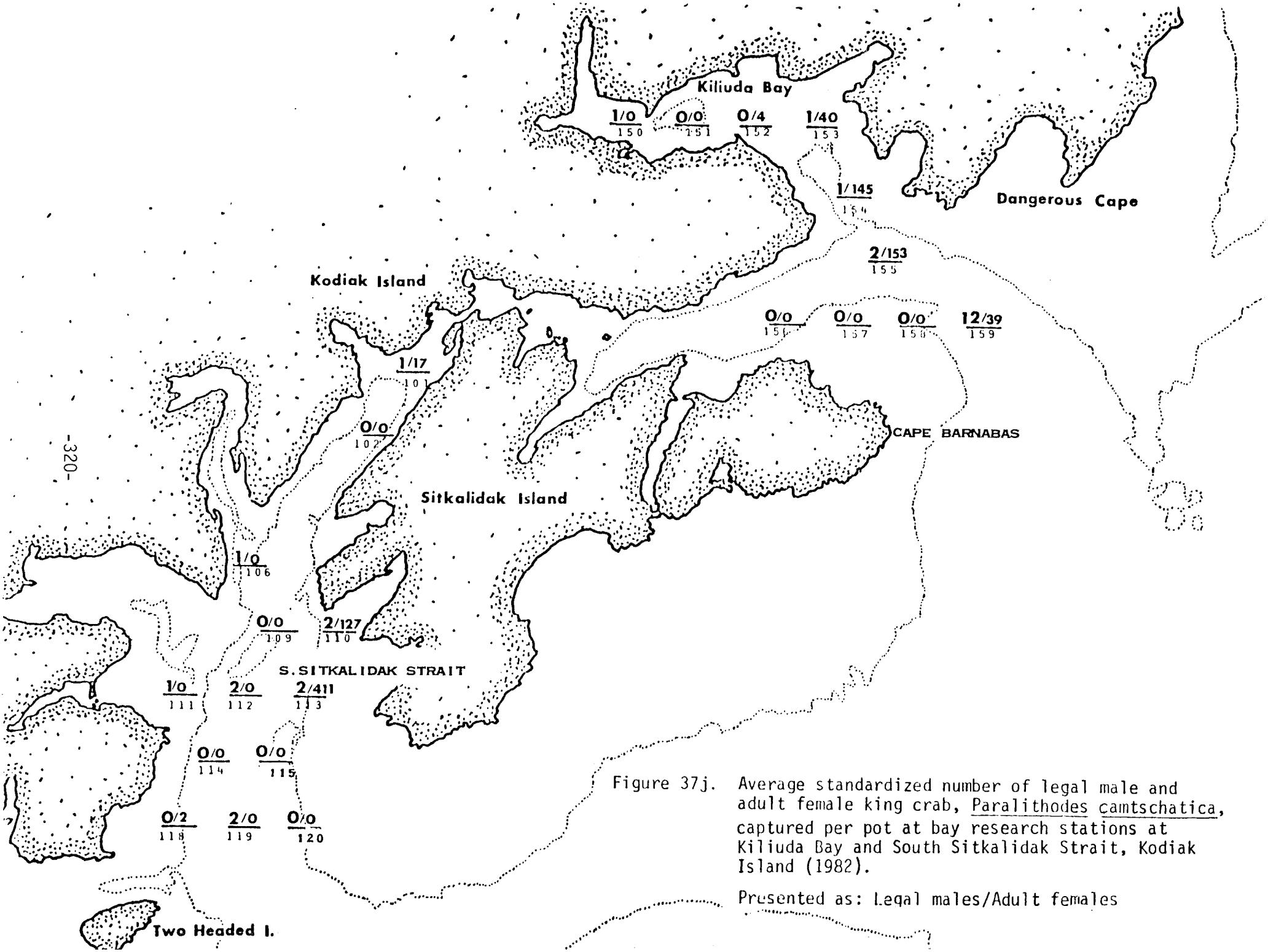


Figure 37j. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1982).

Presented as: Legal males/Adult females

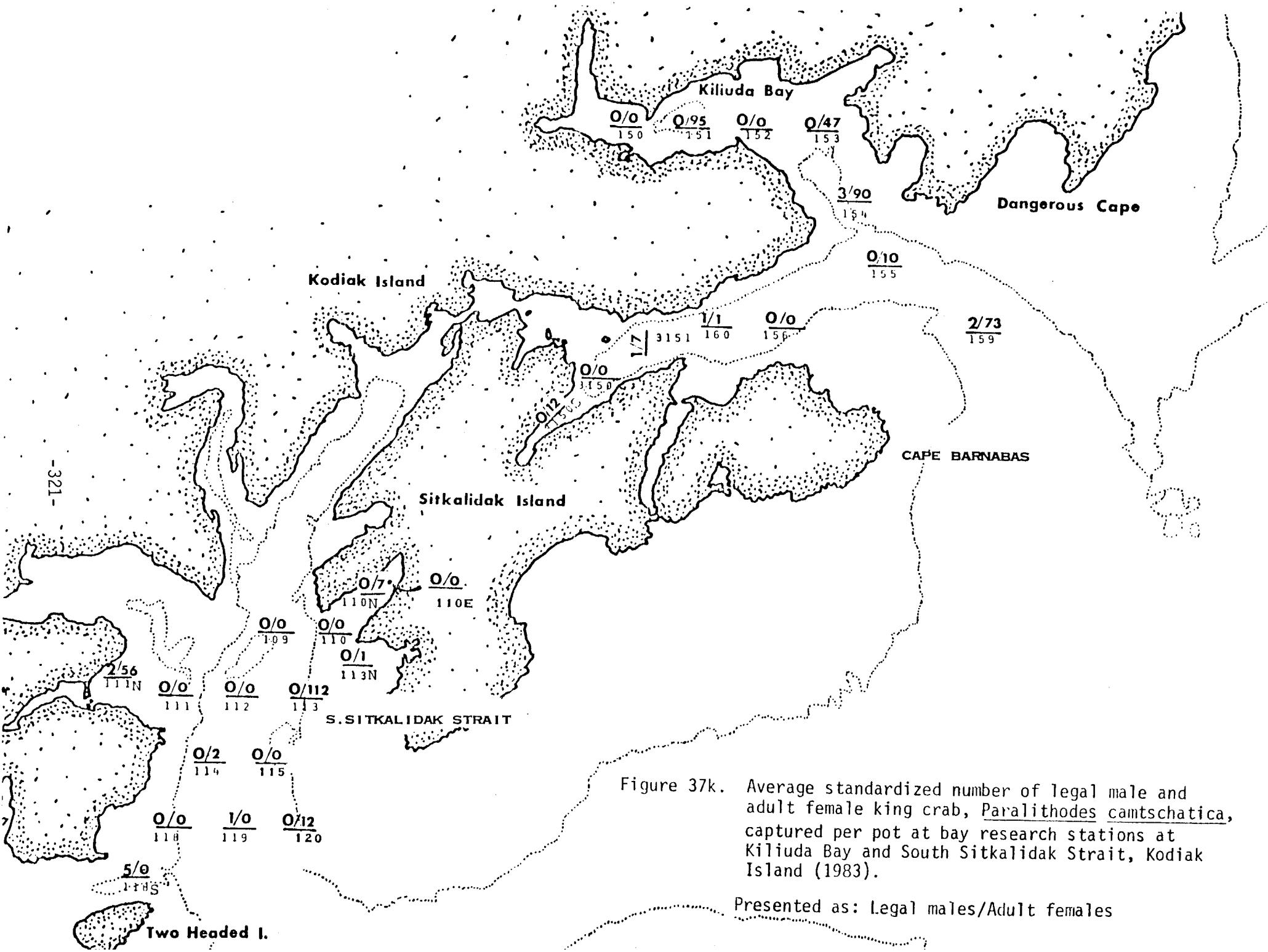


Figure 37k. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1983).

Presented as: Legal males/Adult females

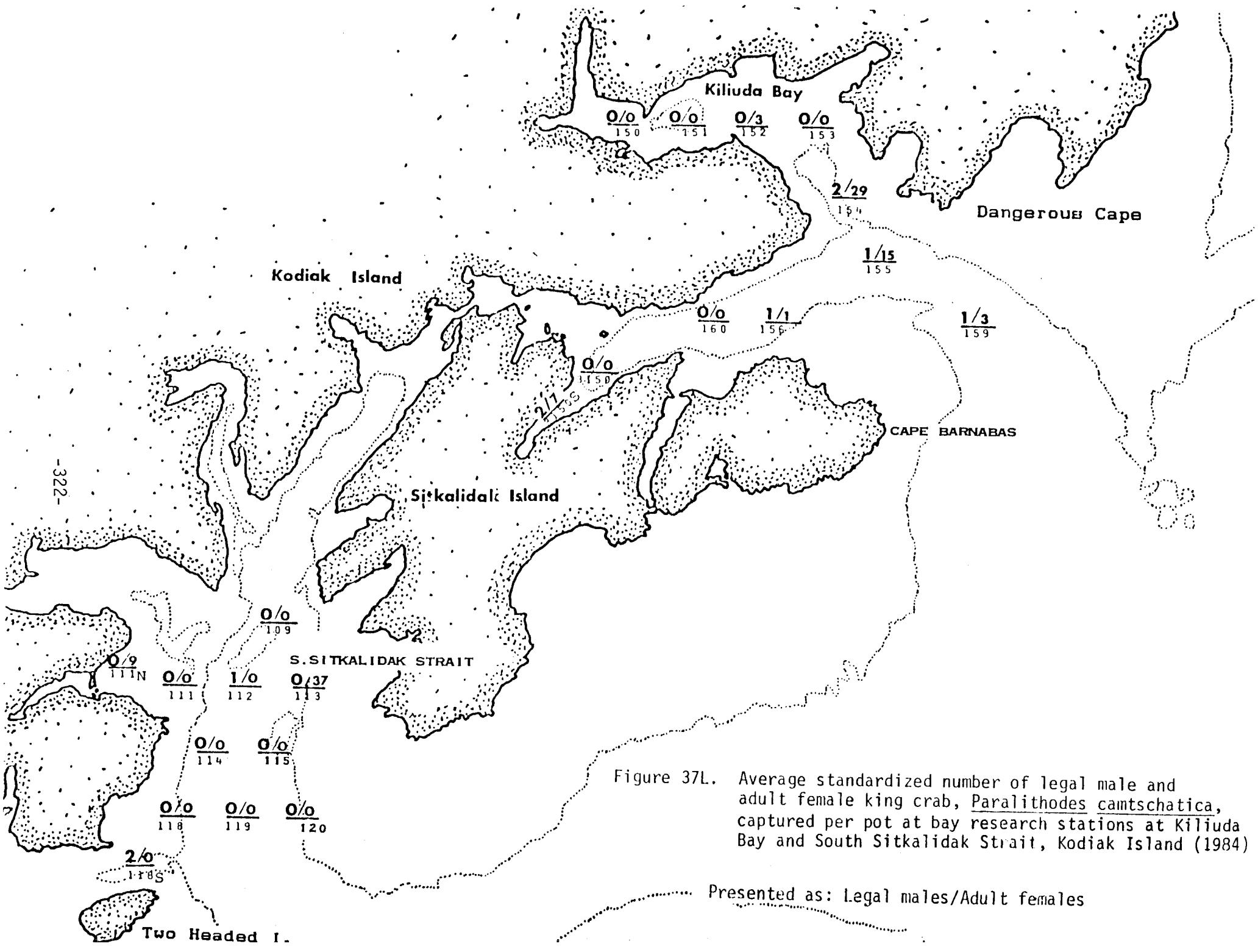


Figure 37L. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1984)

Presented as: Legal males/Adult females

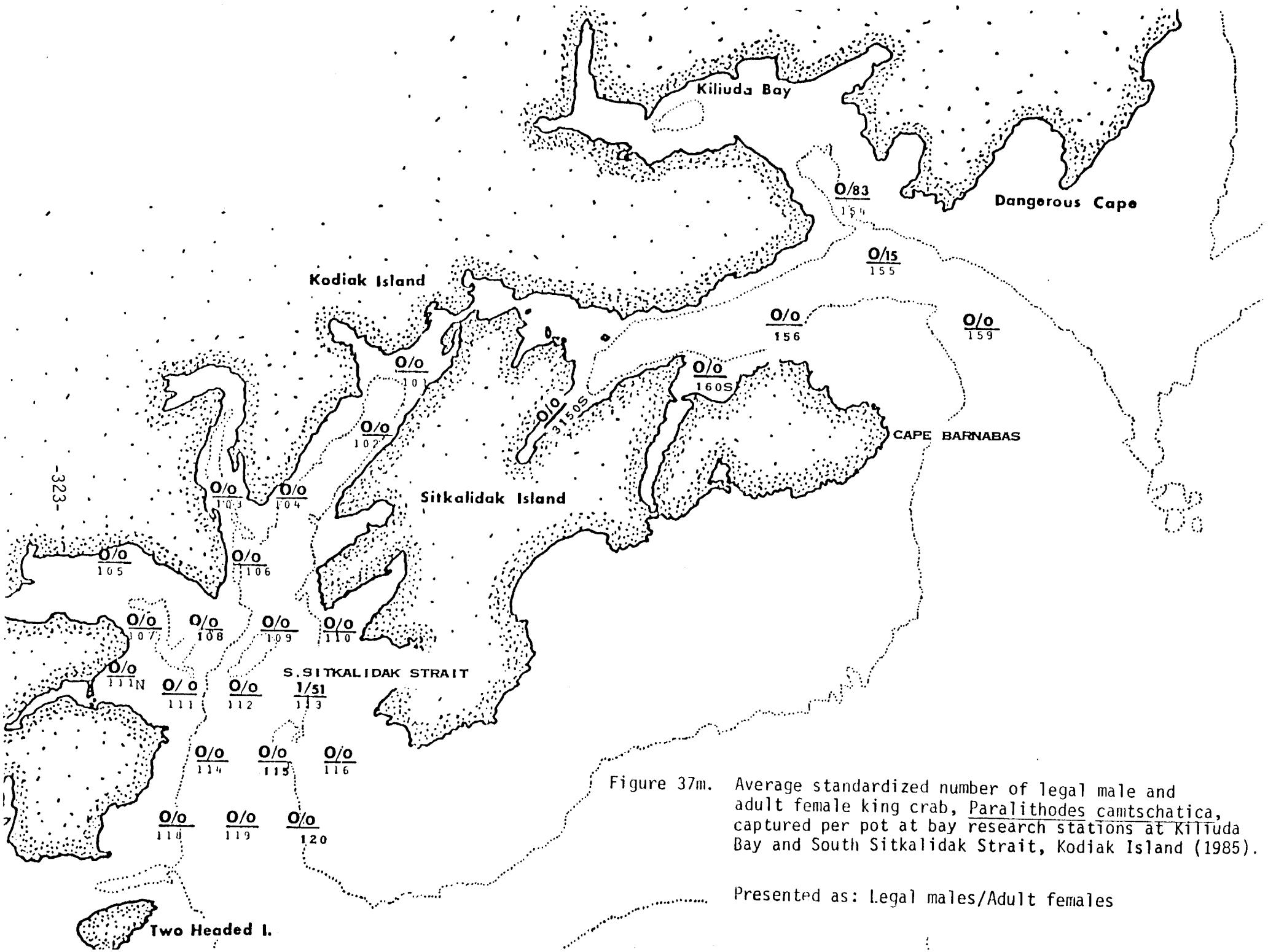


Figure 37m. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1985).

Presented as: Legal males/Adult females

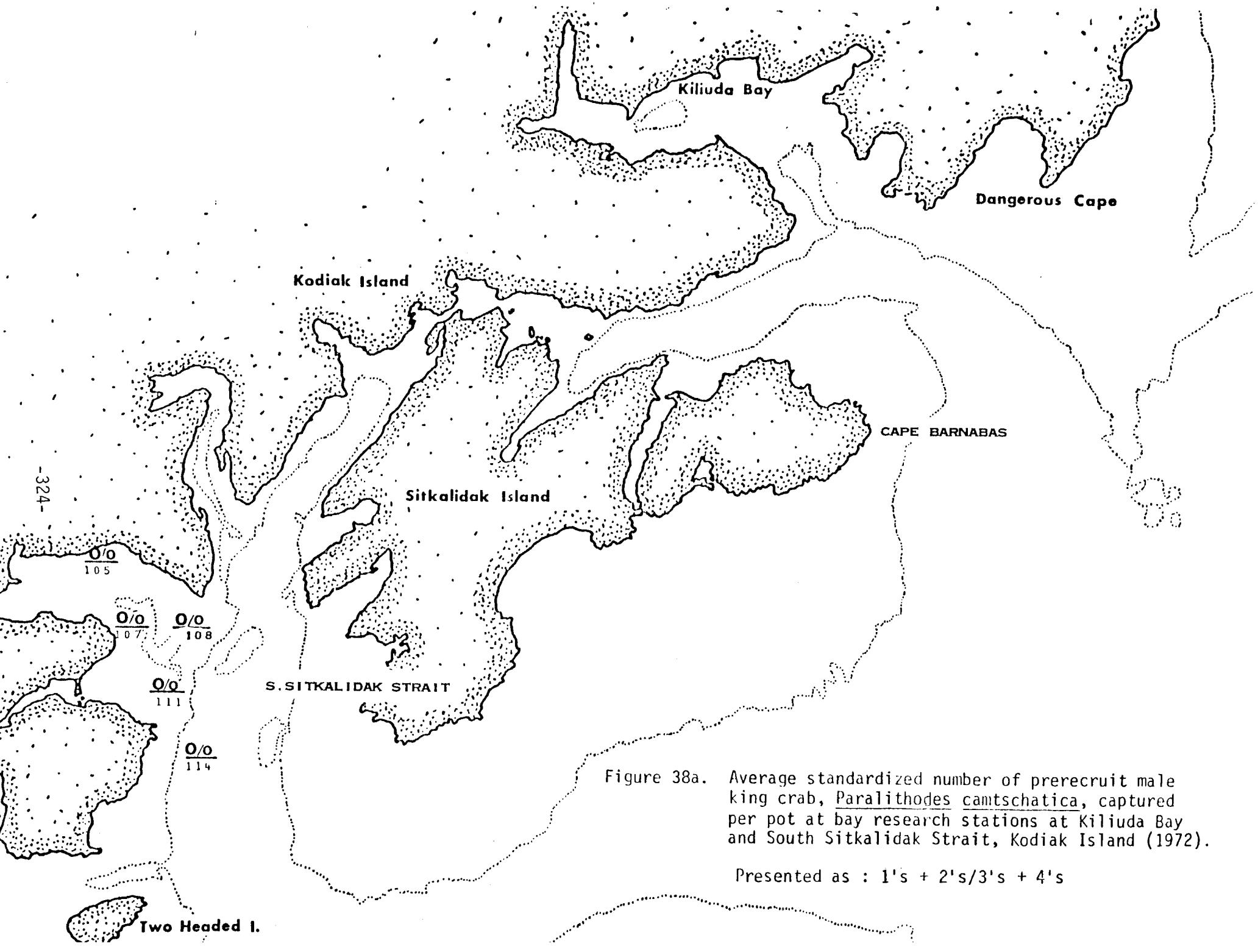


Figure 38a. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1972).

Presented as : 1's + 2's/3's + 4's

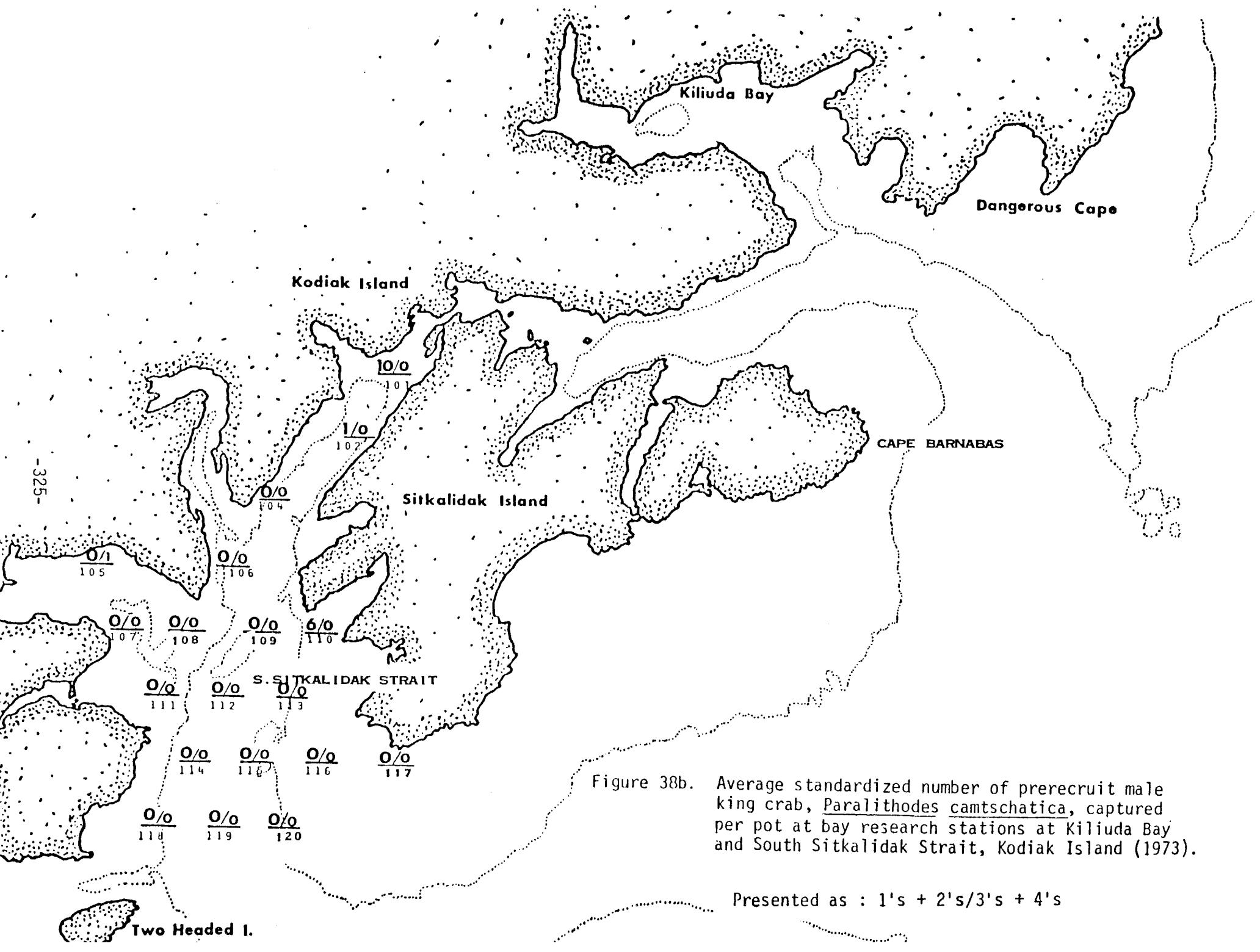


Figure 38b. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1973).

Presented as : 1's + 2's/3's + 4's

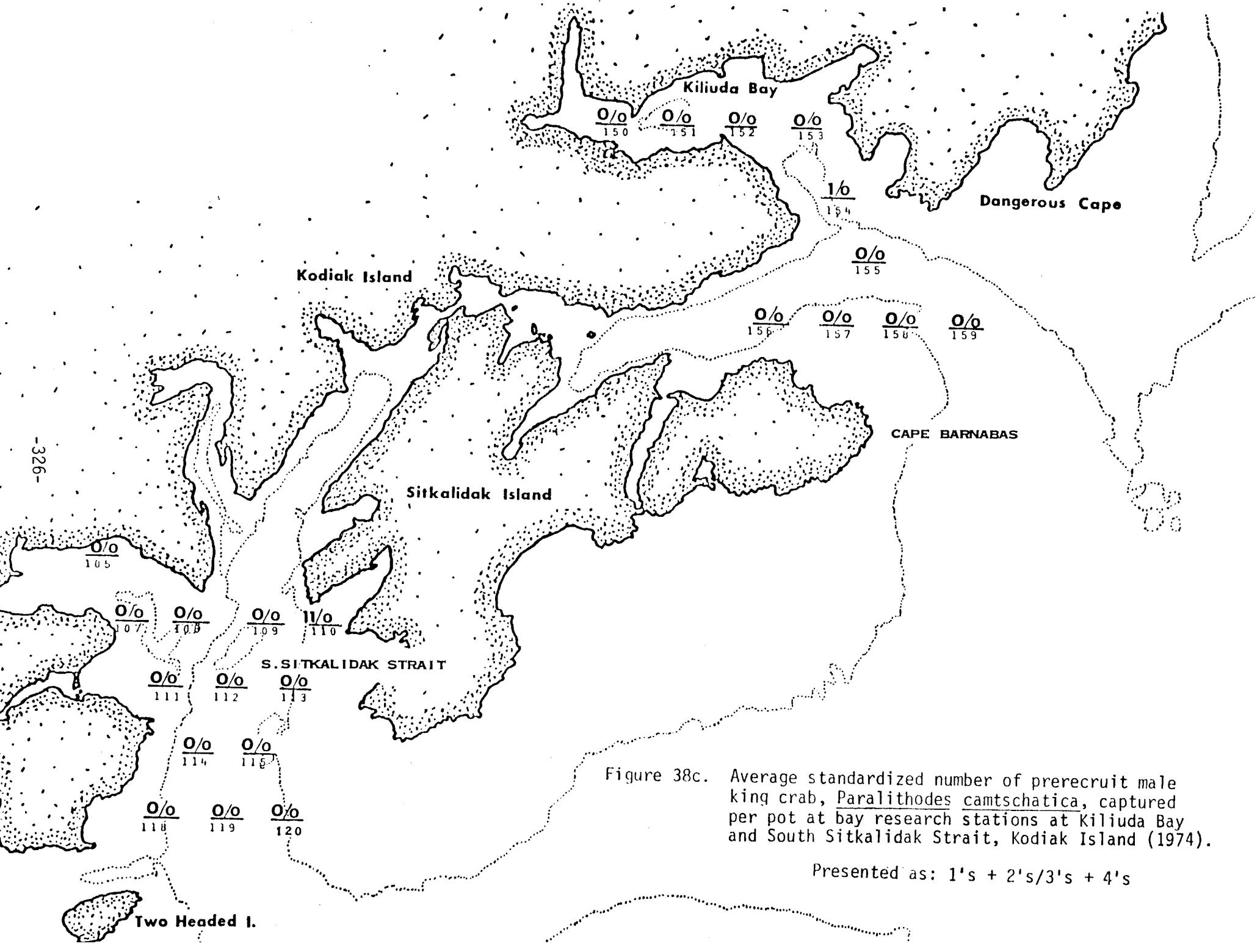


Figure 38c. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1974).

Presented as: 1's + 2's/3's + 4's

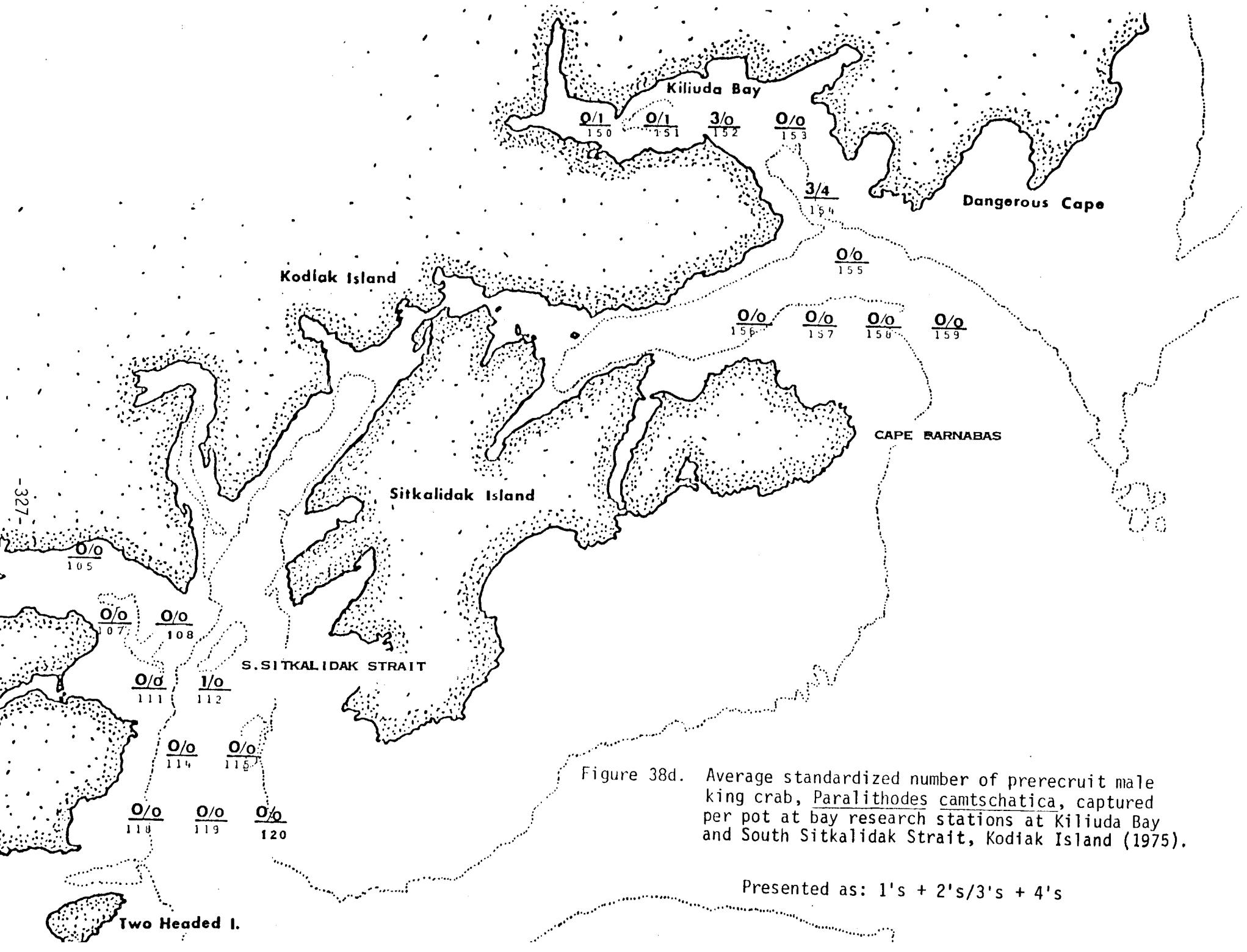


Figure 38d. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1975).

Presented as: 1's + 2's/3's + 4's

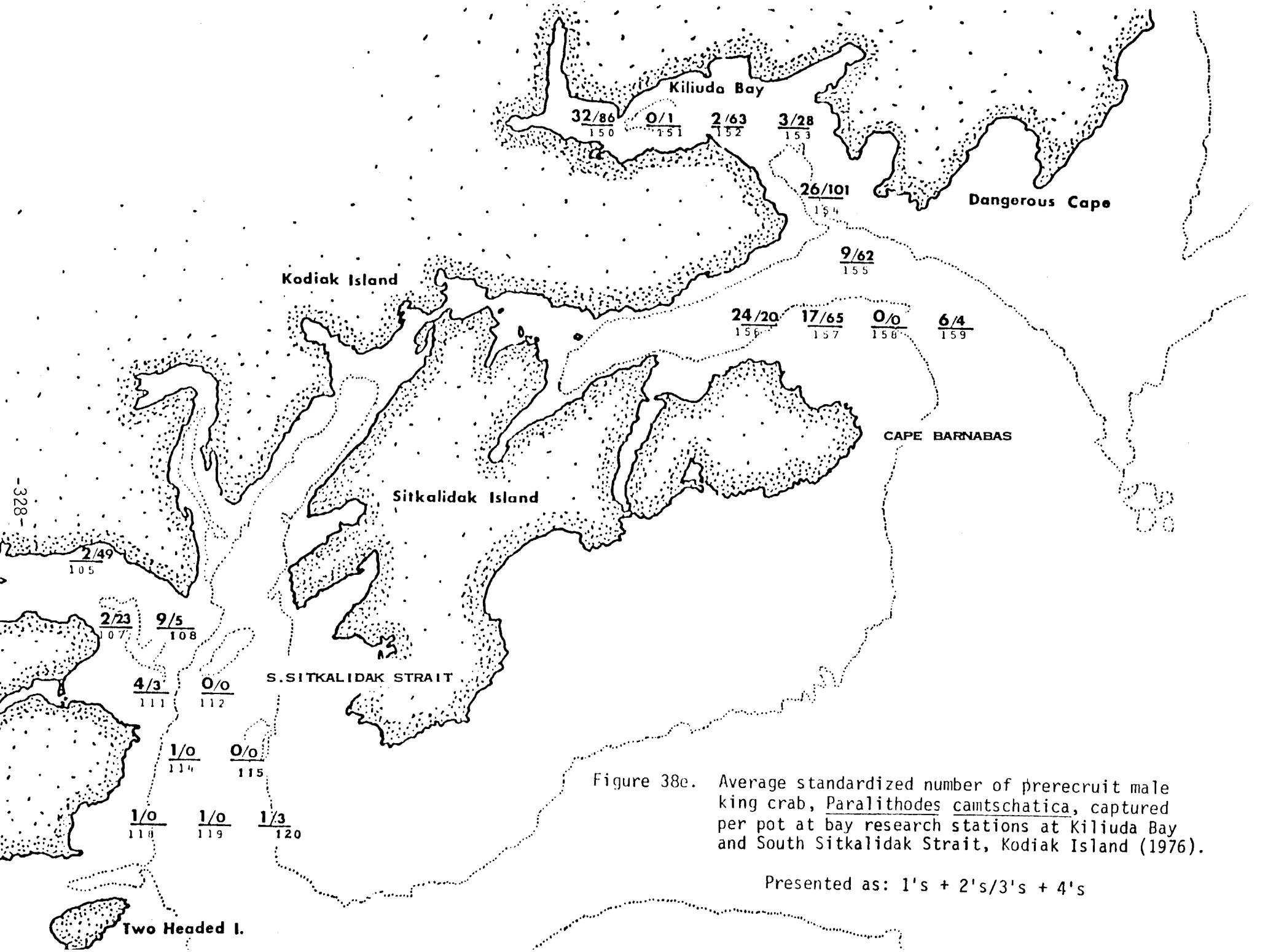


Figure 38e. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1976).

Presented as: 1's + 2's/3's + 4's

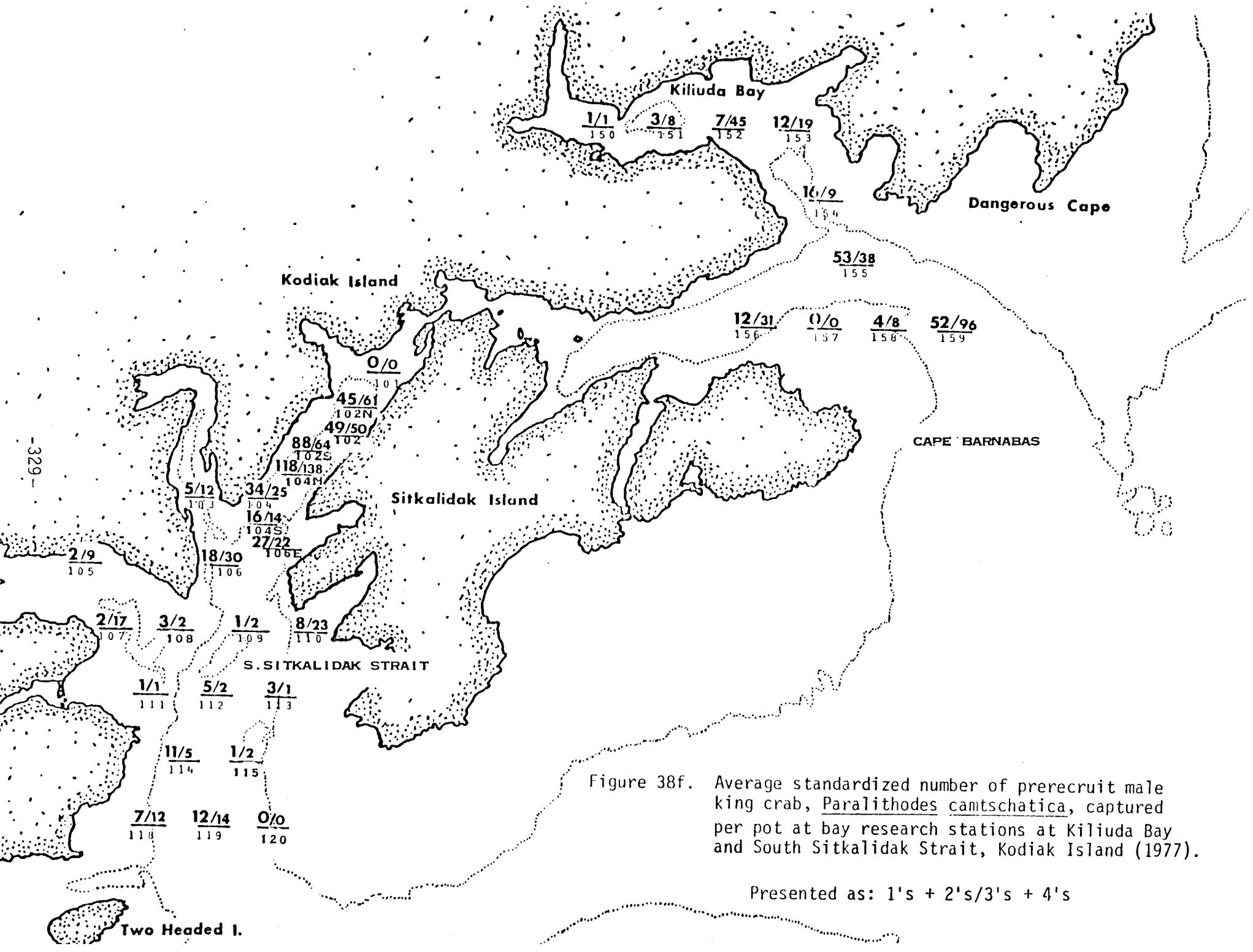


Figure 38f. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1977).

Presented as: 1's + 2's/3's + 4's

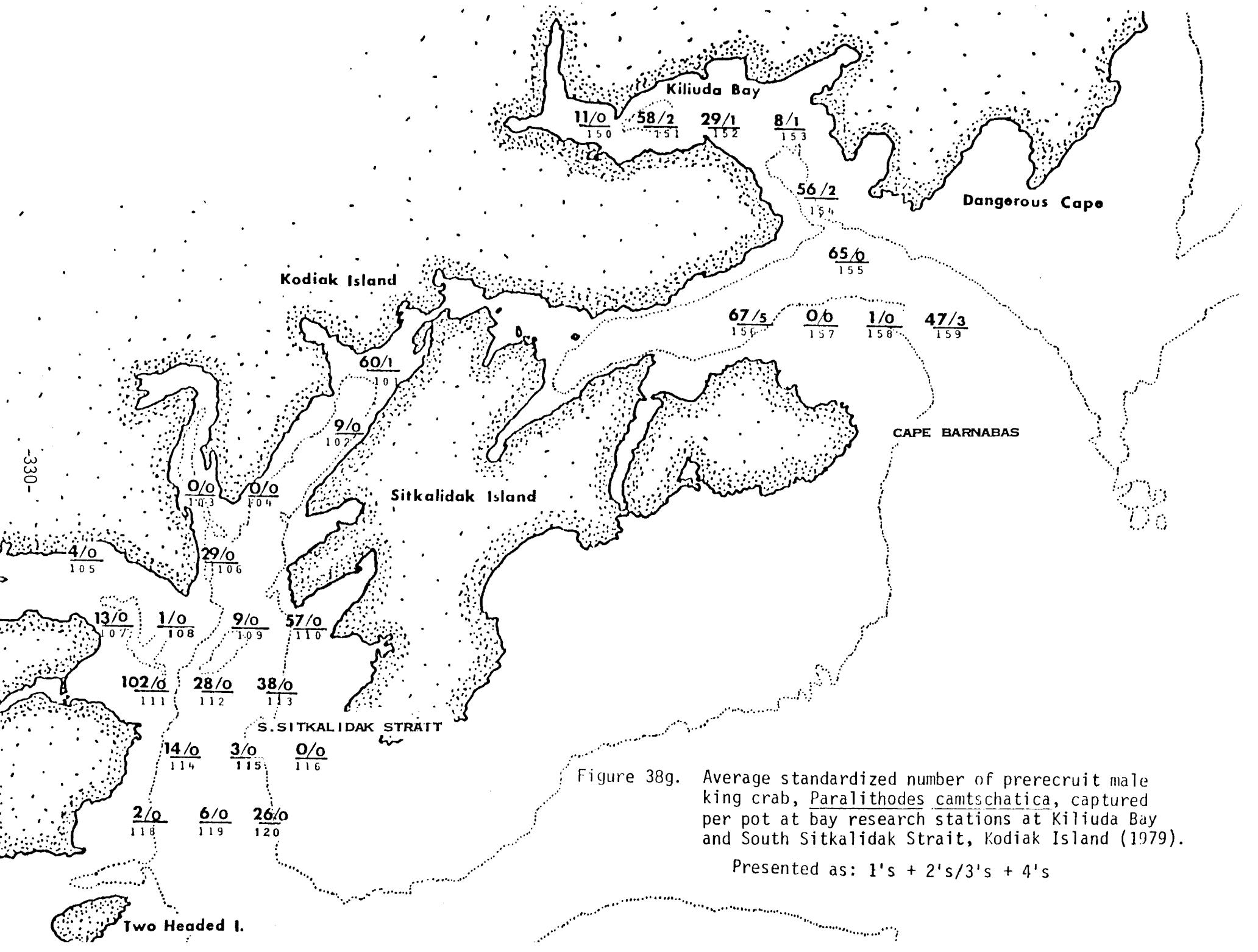


Figure 38g. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1979).

Presented as: 1's + 2's/3's + 4's

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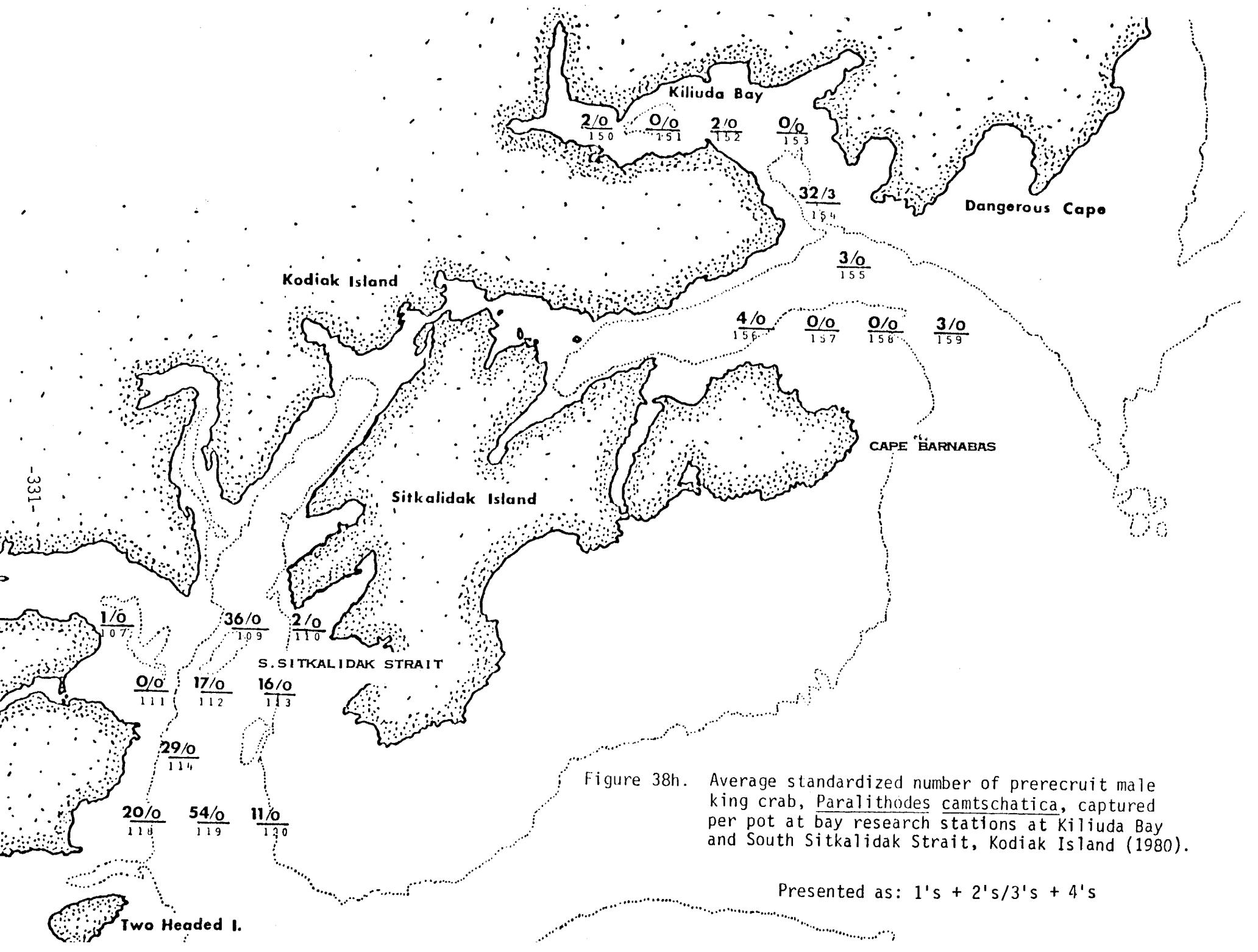


Figure 38h. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1980).

Presented as: 1's + 2's/3's + 4's

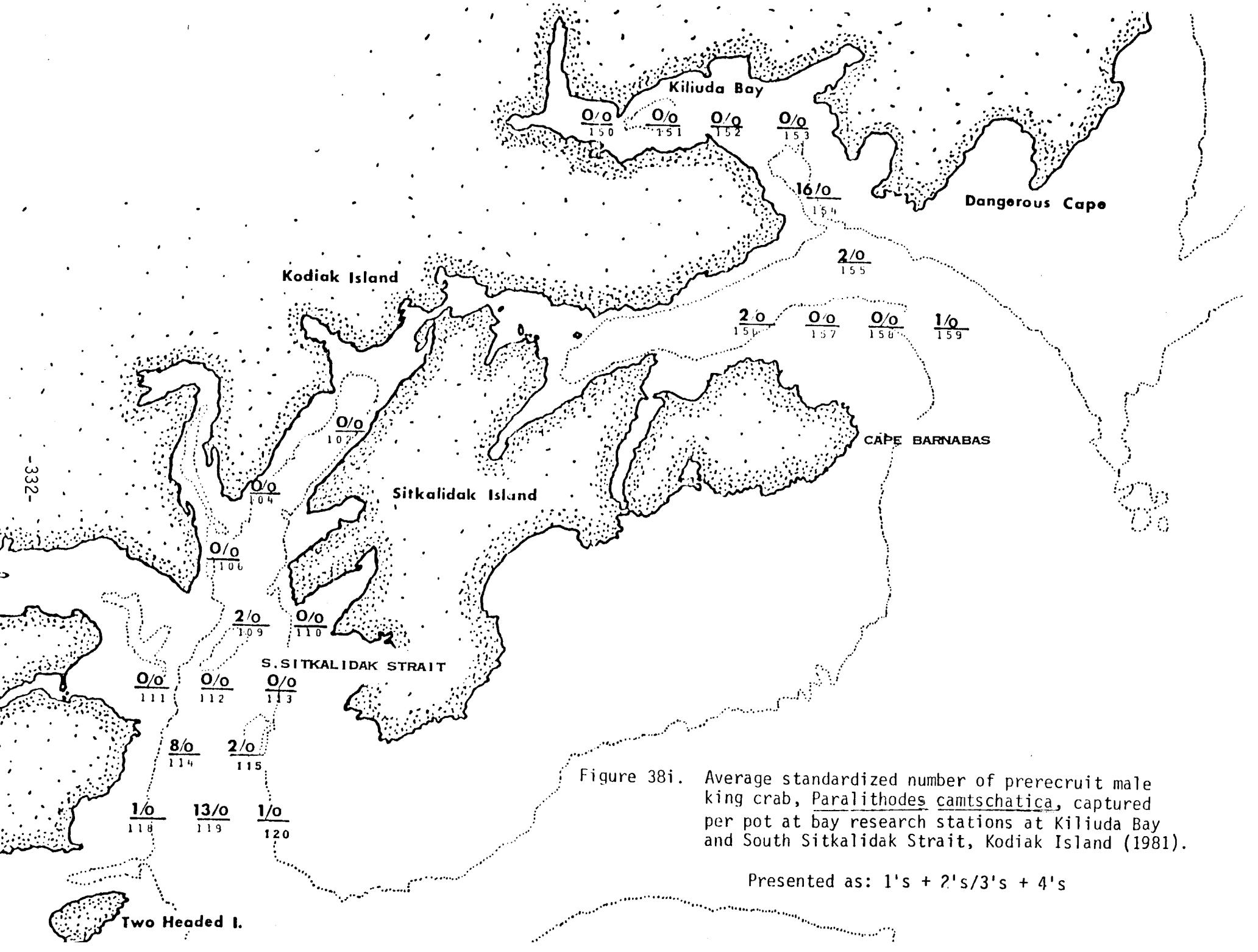
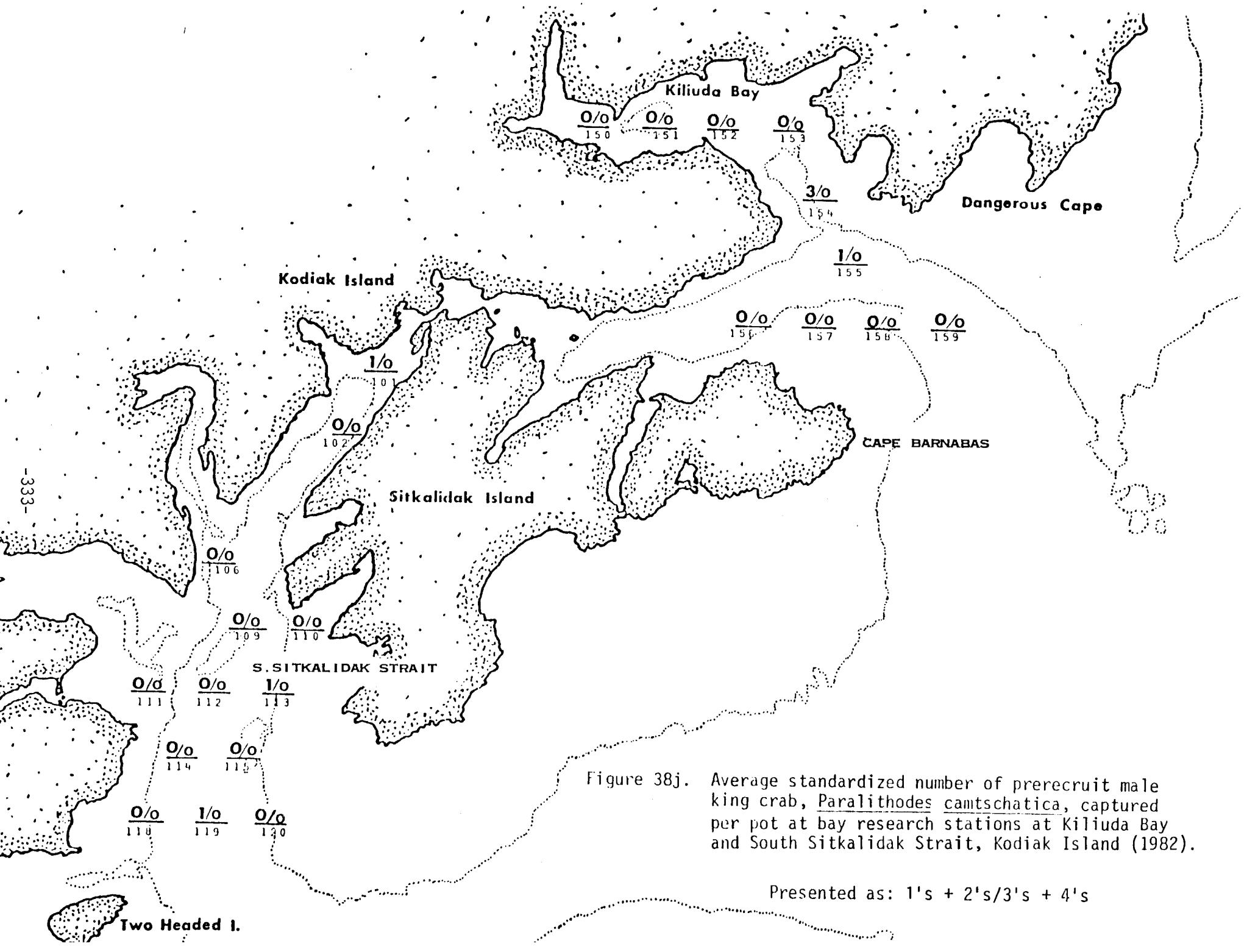


Figure 38i. Average standardized number of prae-recruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1981).

Presented as: 1's + 2's/3's + 4's



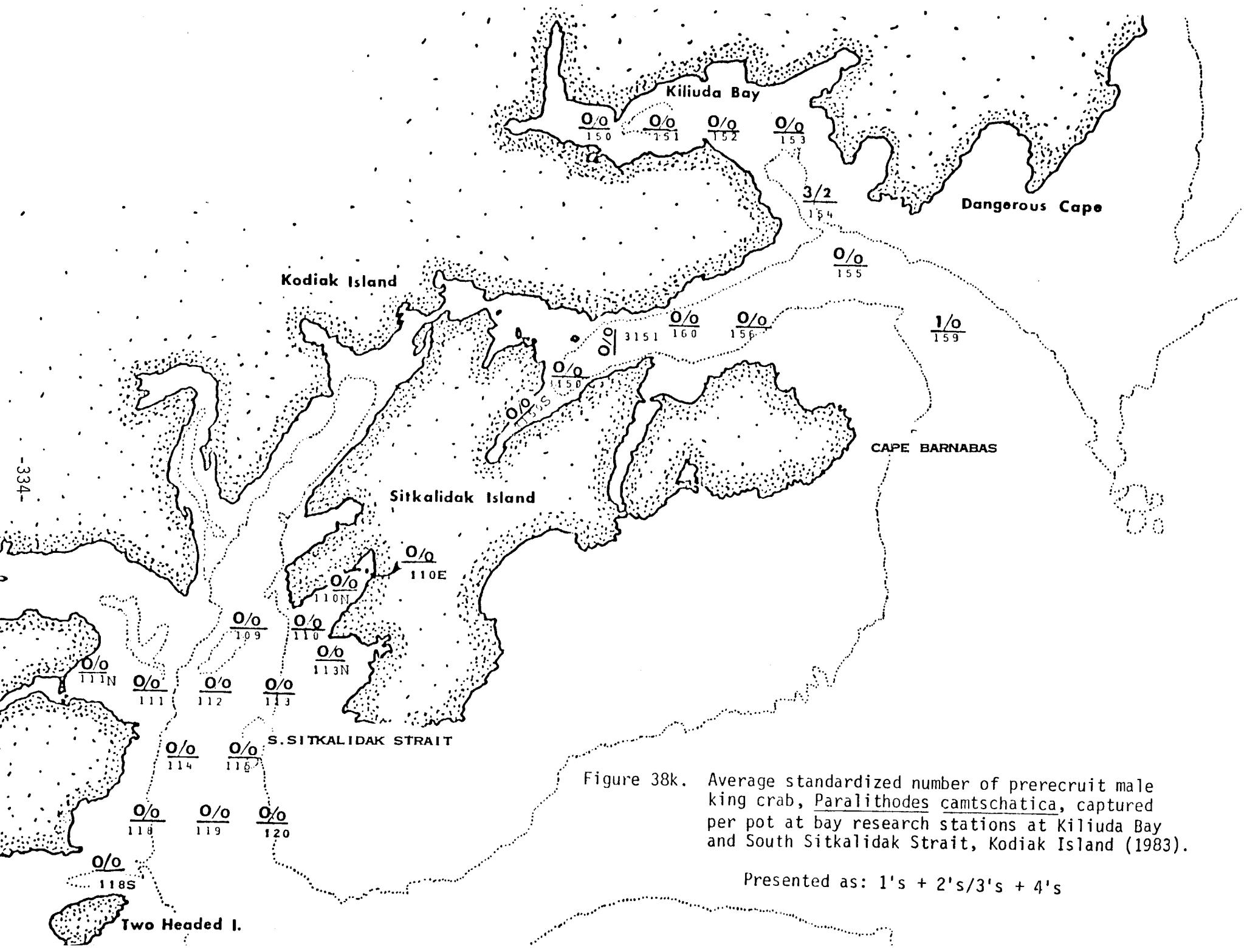


Figure 38k. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1983).

Presented as: 1's + 2's/3's + 4's

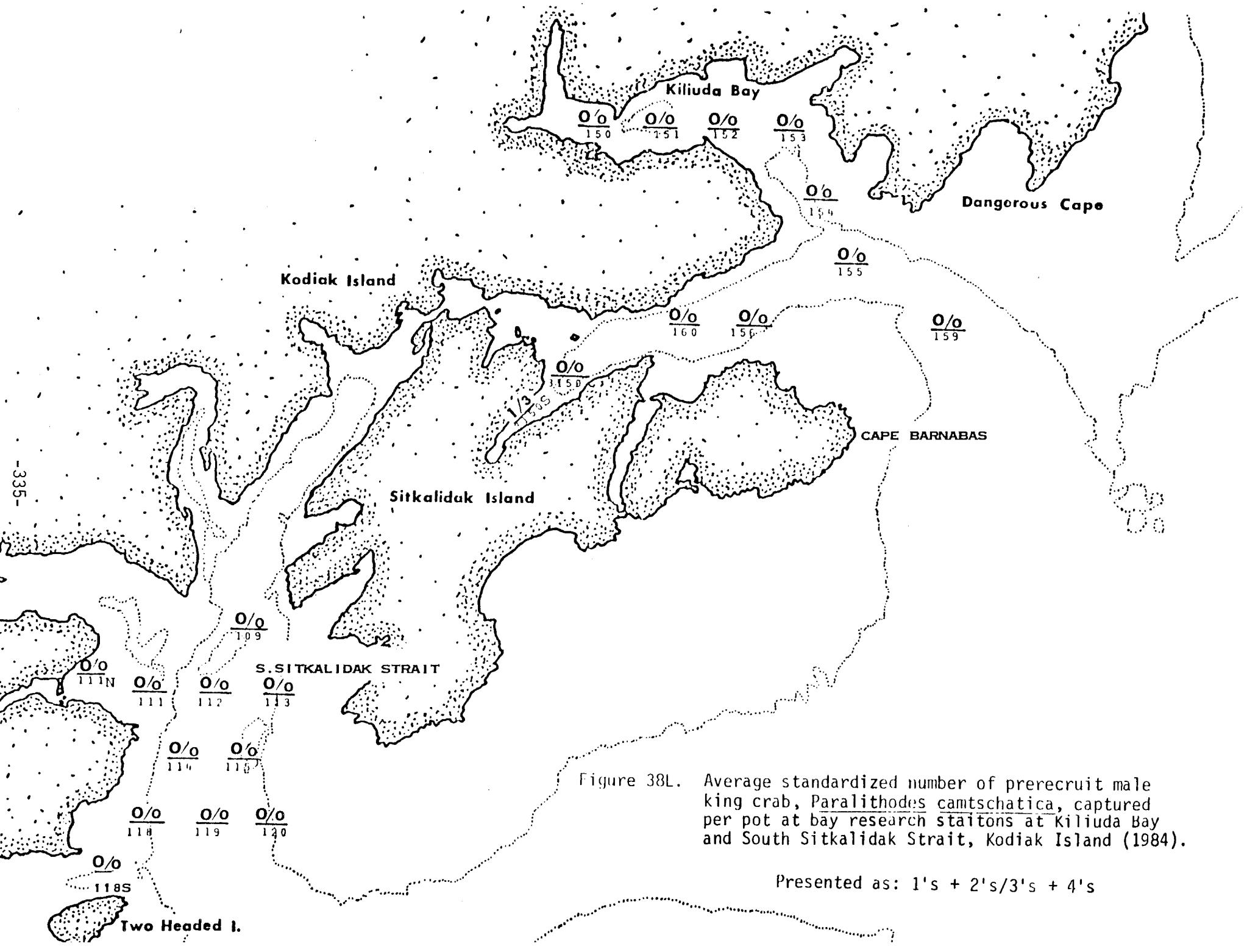


Figure 38L. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1984).

Presented as: 1's + 2's/3's + 4's

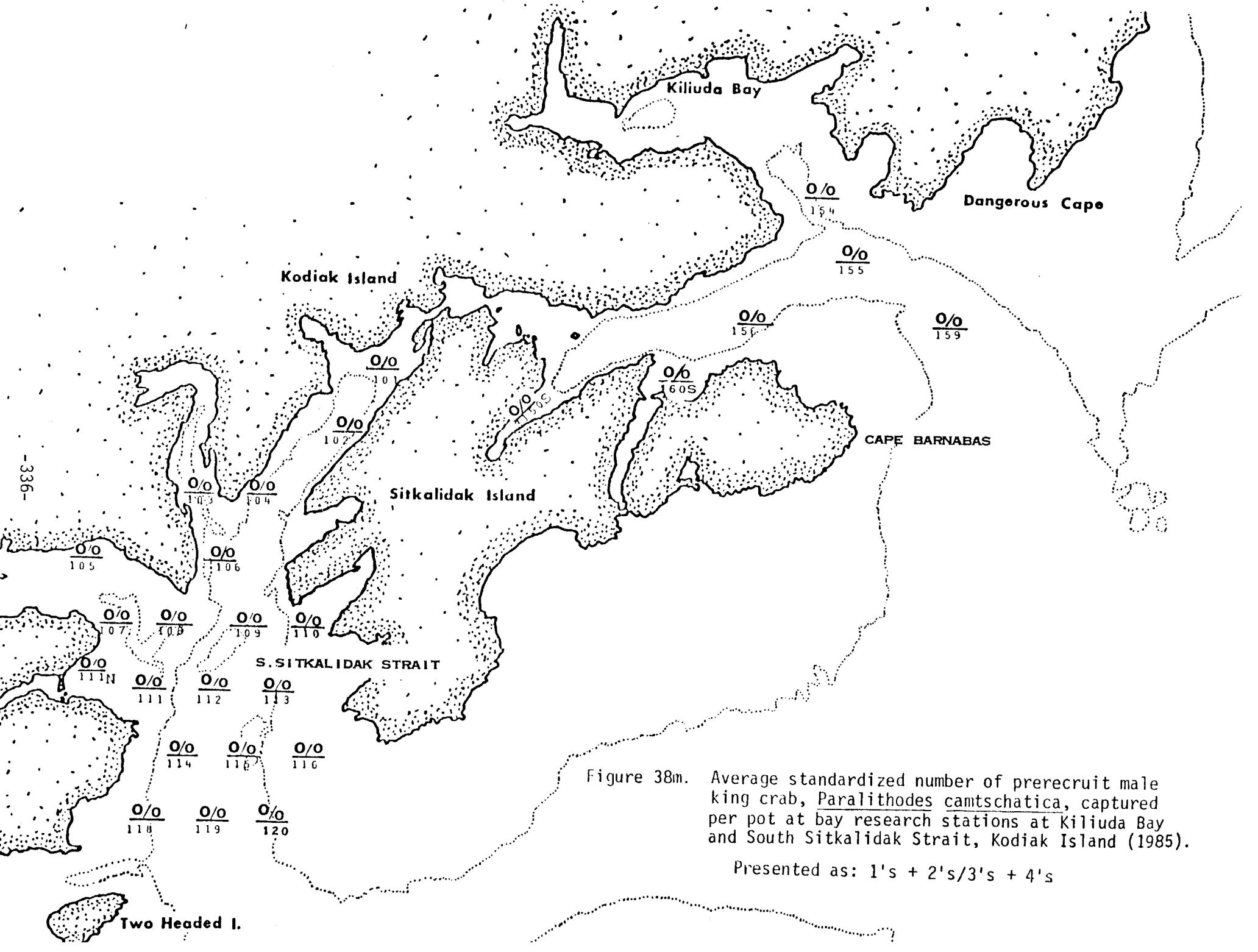


Figure 38m. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1985).

Presented as: 1's + 2's/3's + 4's

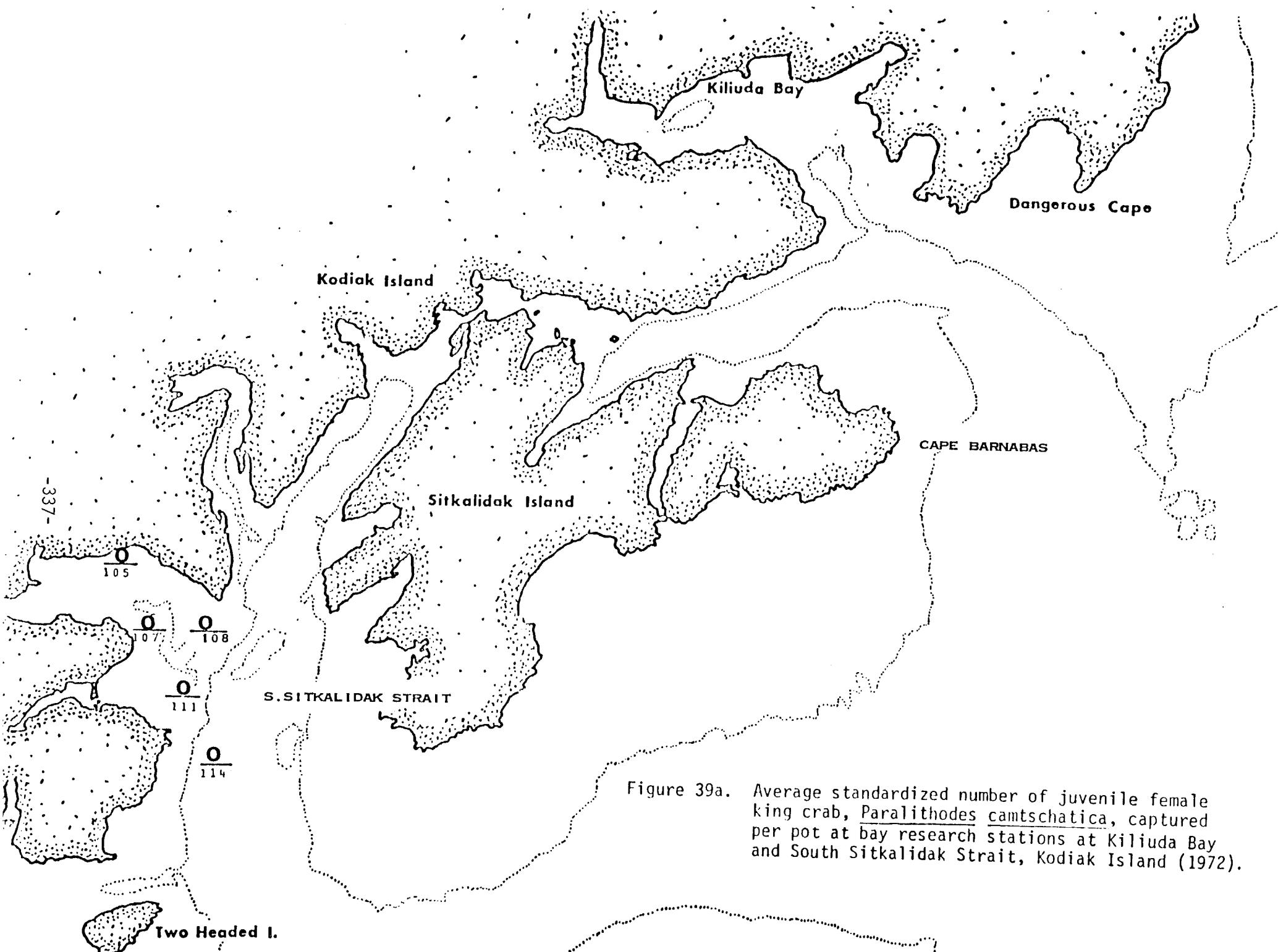


Figure 39a. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1972).

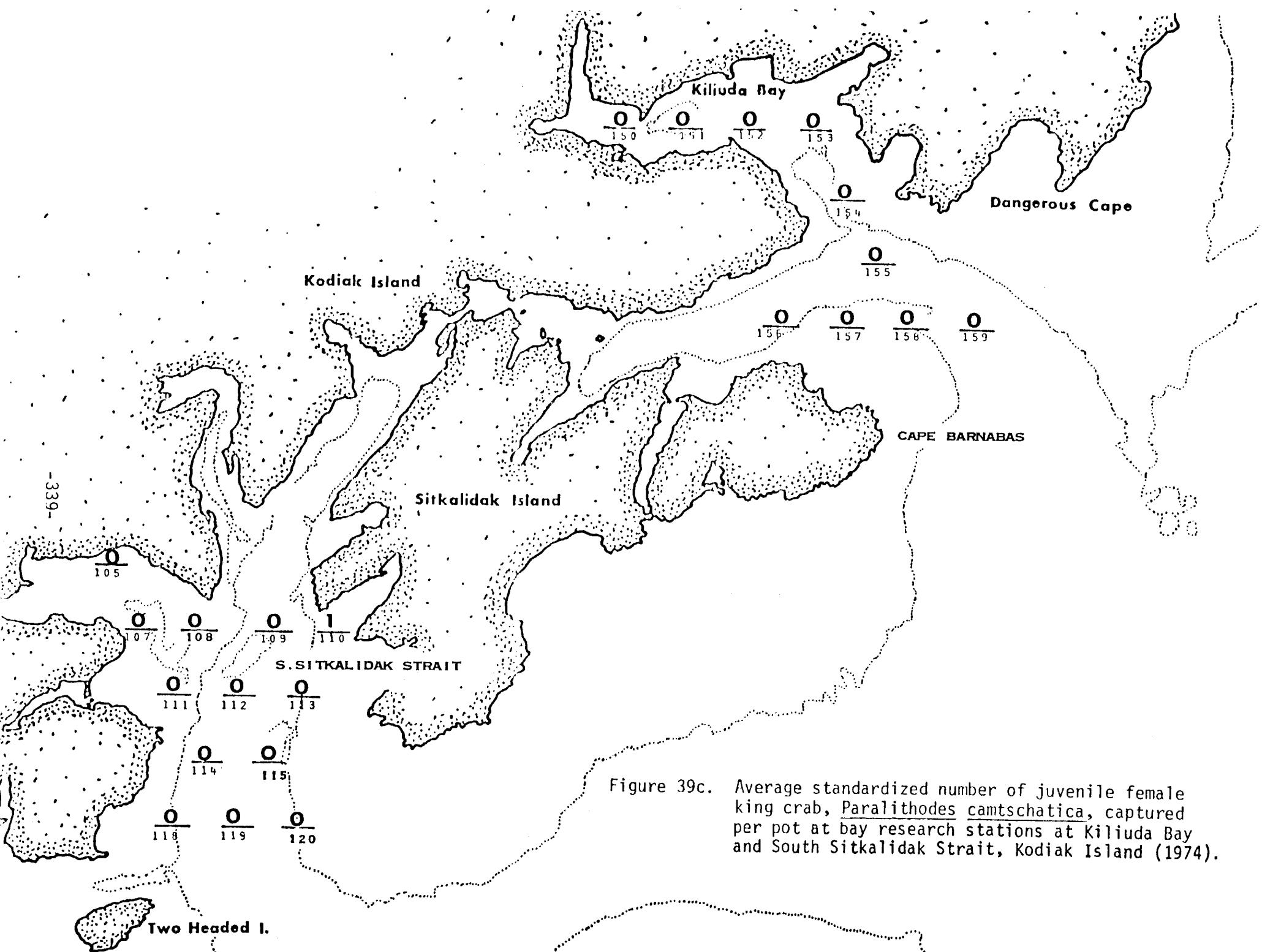


Figure 39c. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1974).

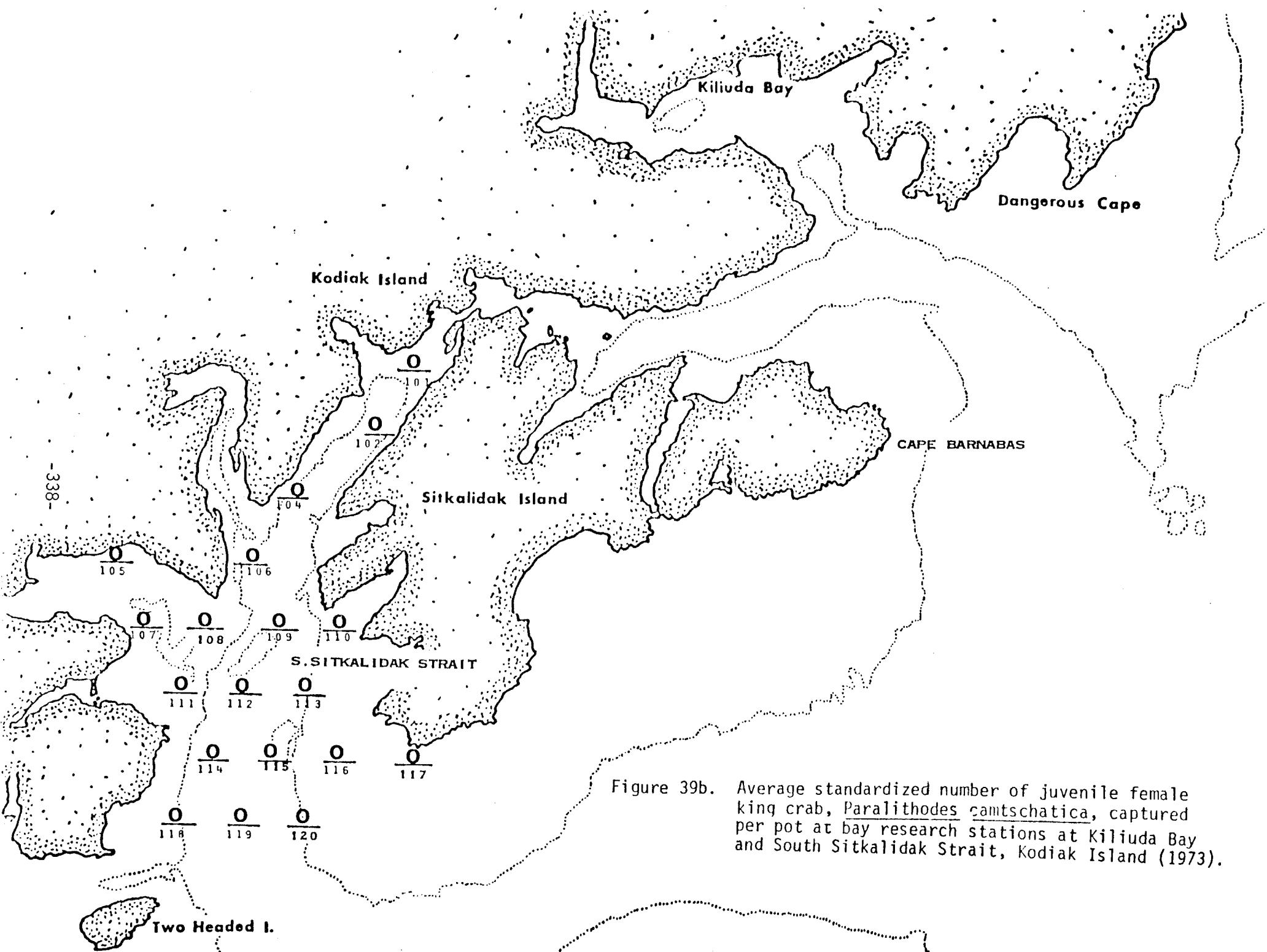


Figure 39b. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1973).

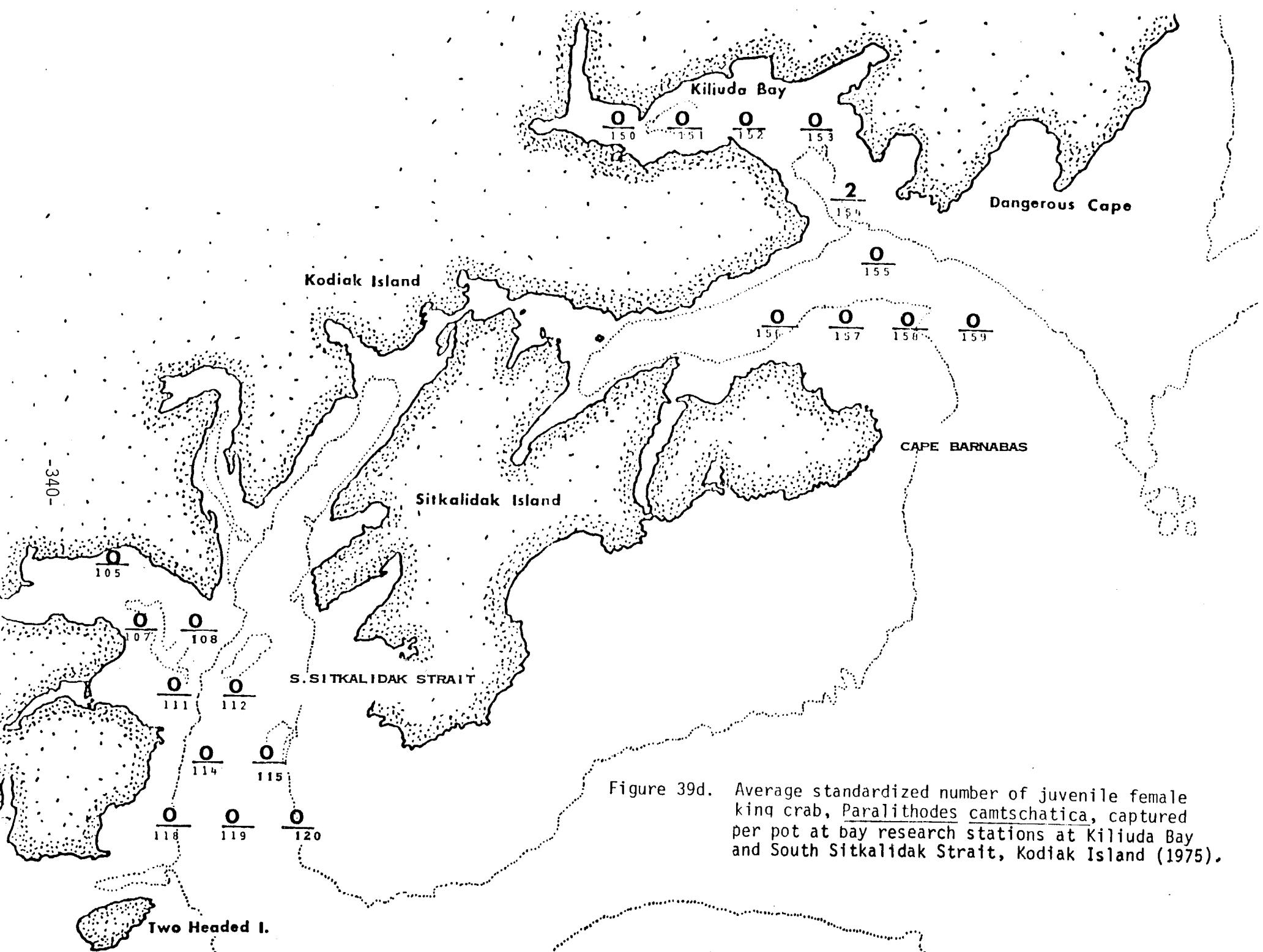


Figure 39d. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1975).

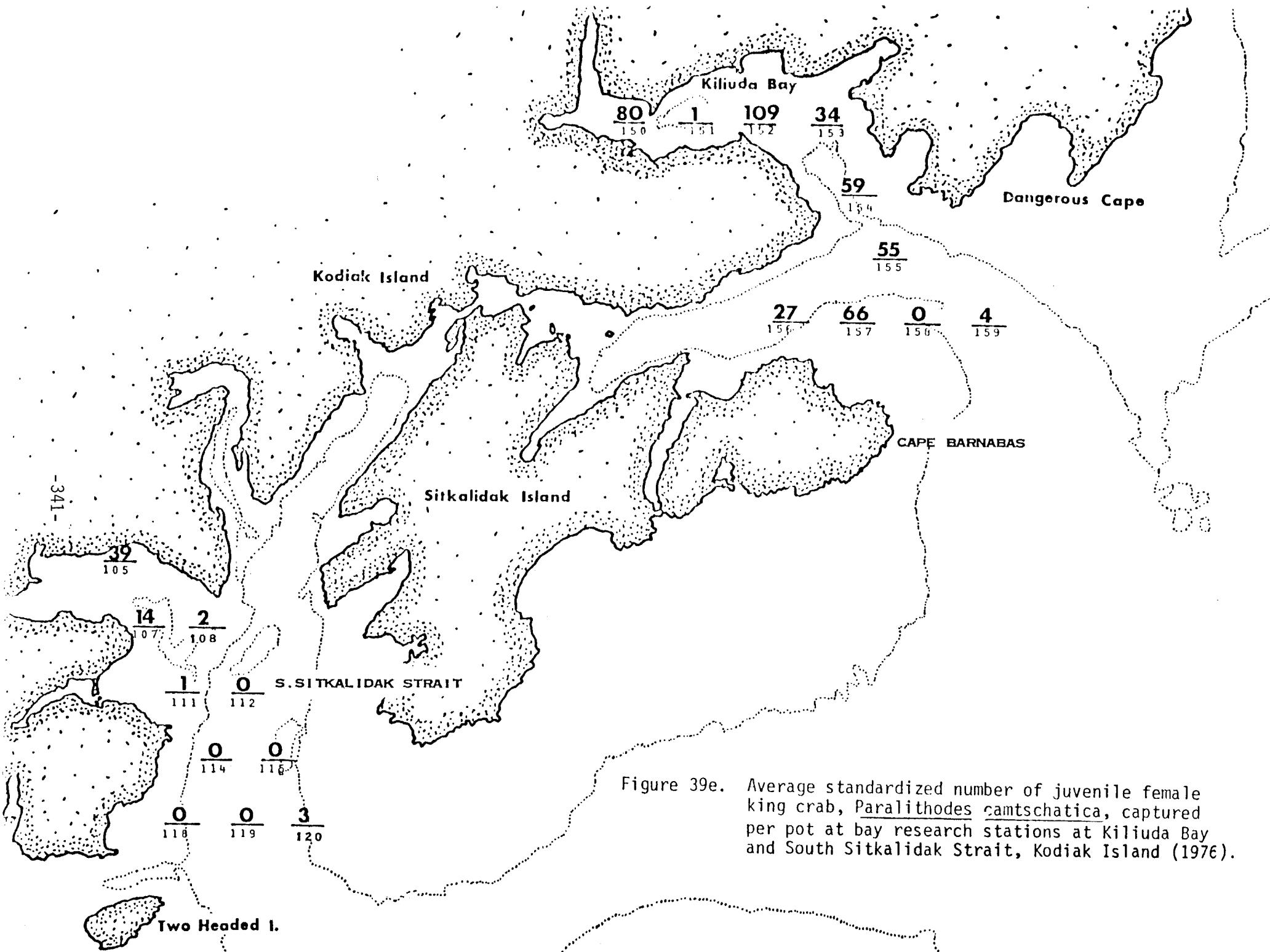


Figure 39e. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1976).

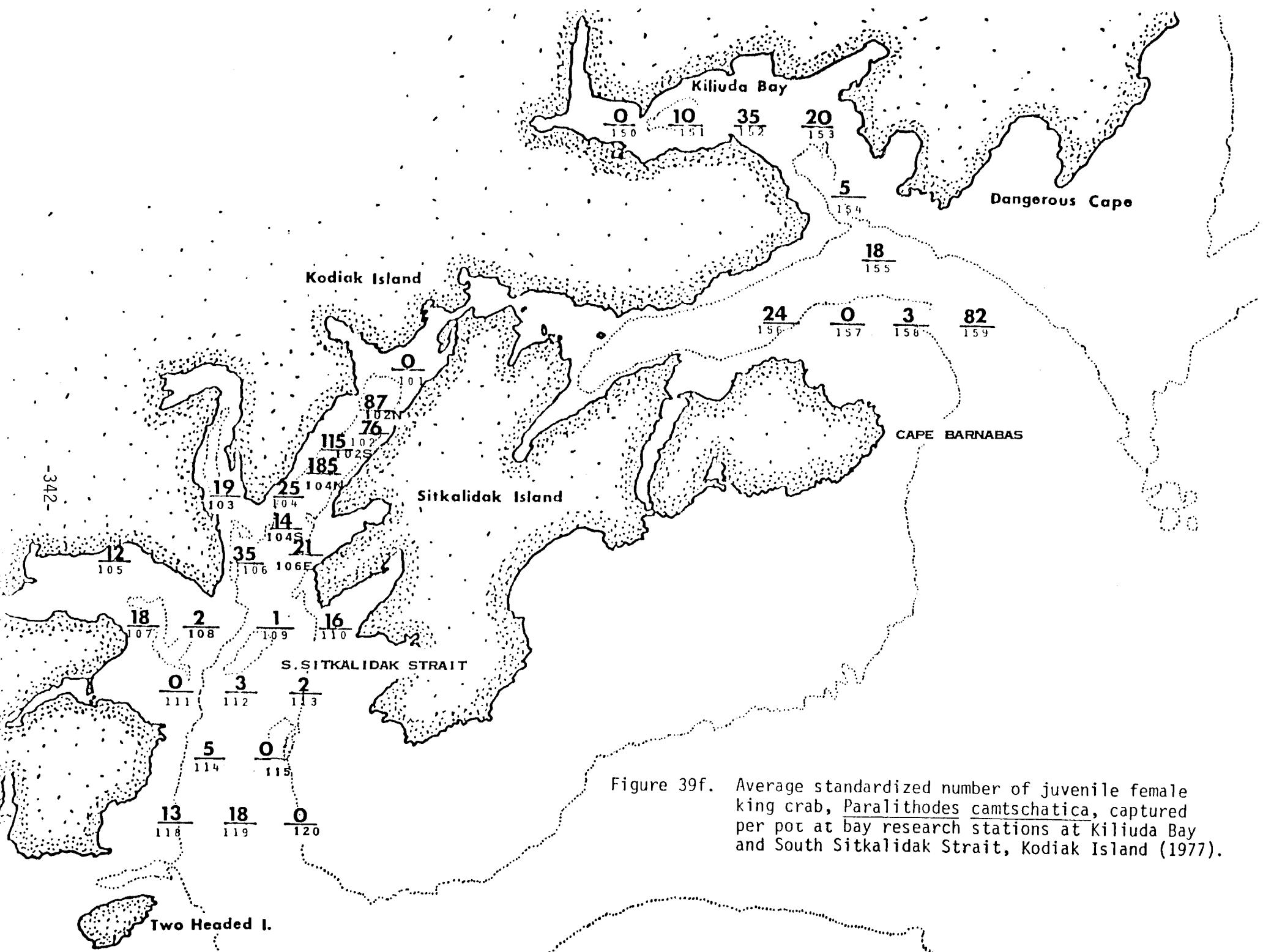


Figure 39f. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1977).

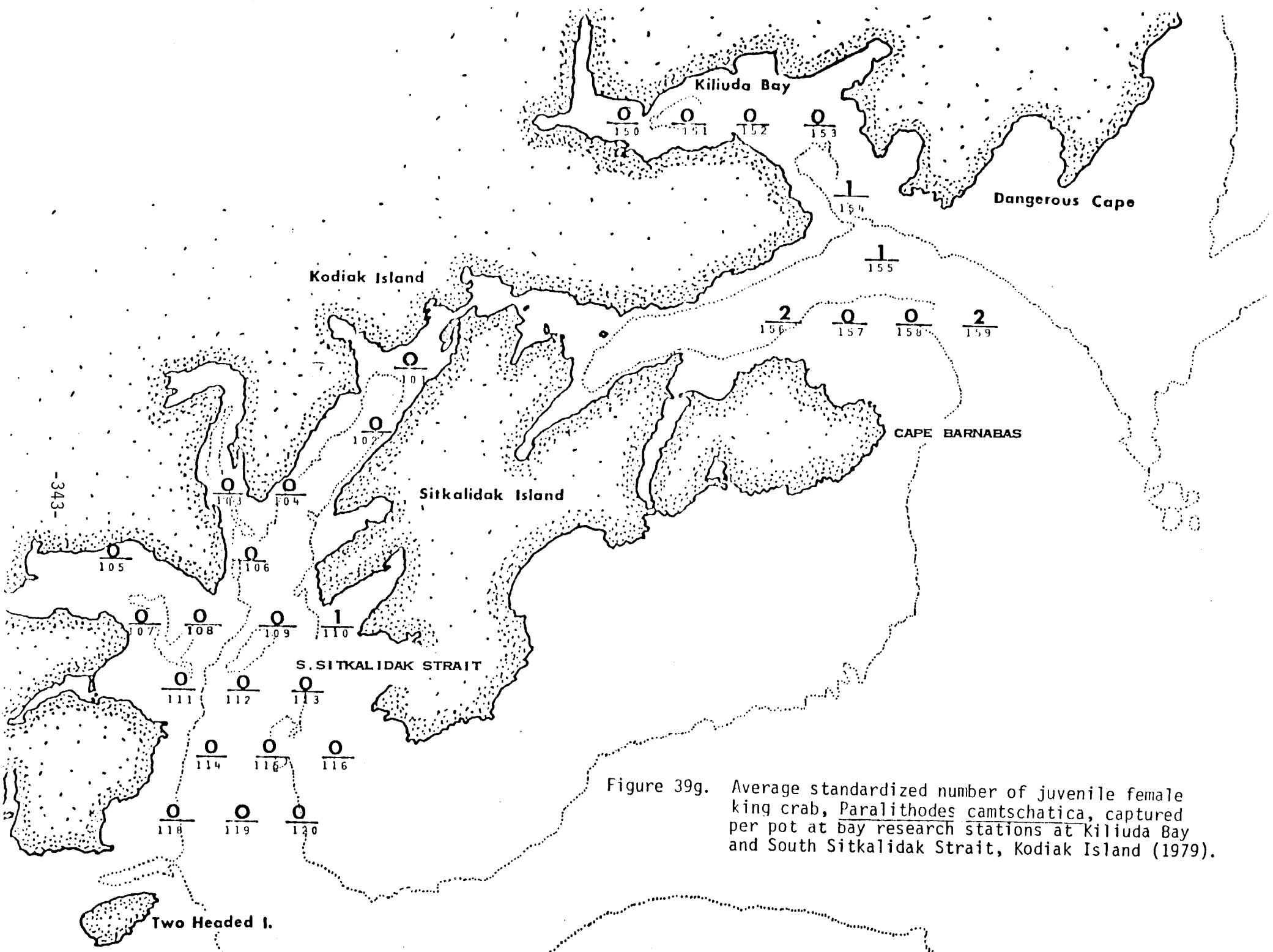


Figure 39g. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1979).

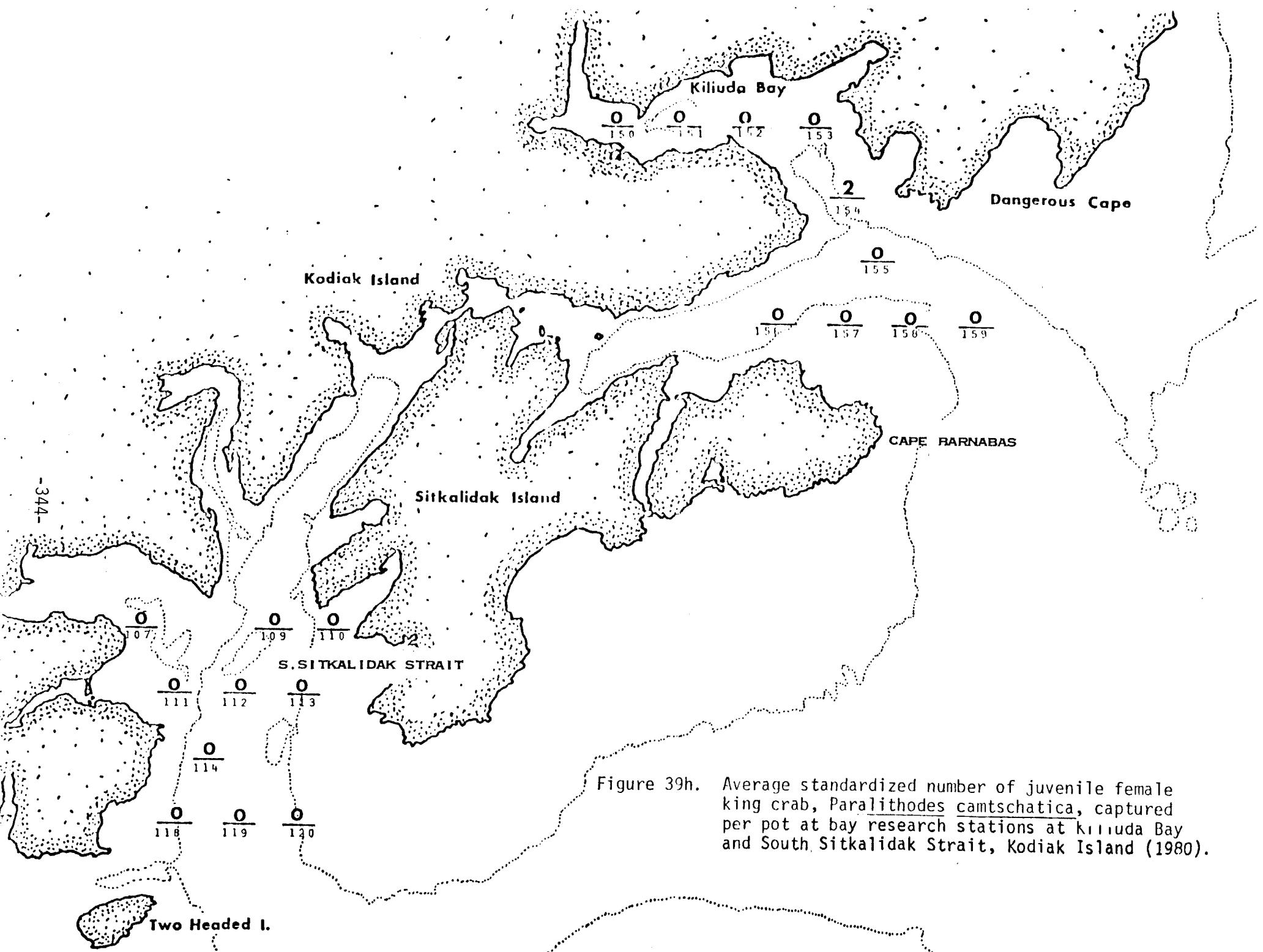


Figure 39h. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1980).

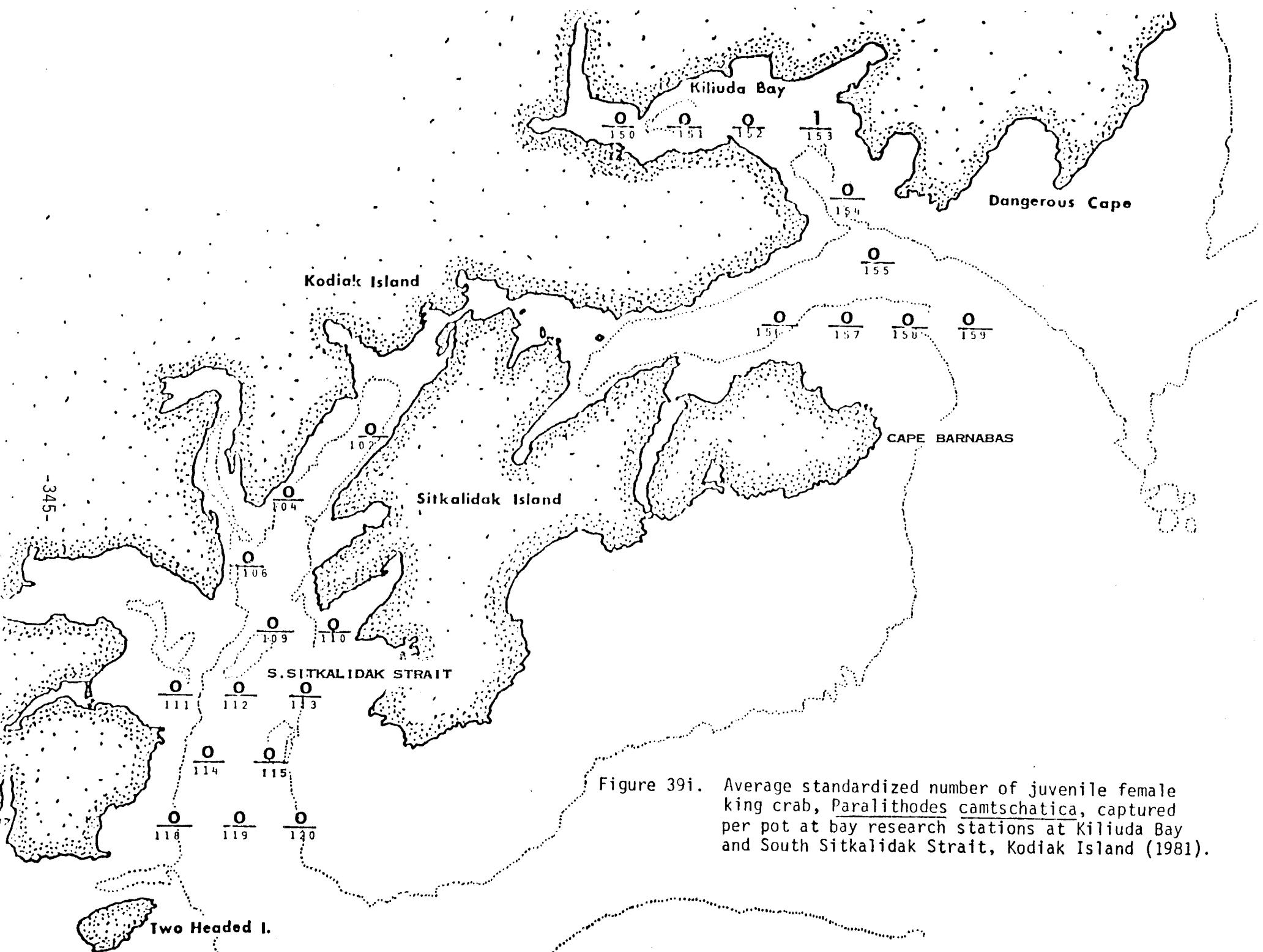


Figure 39i. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1981).

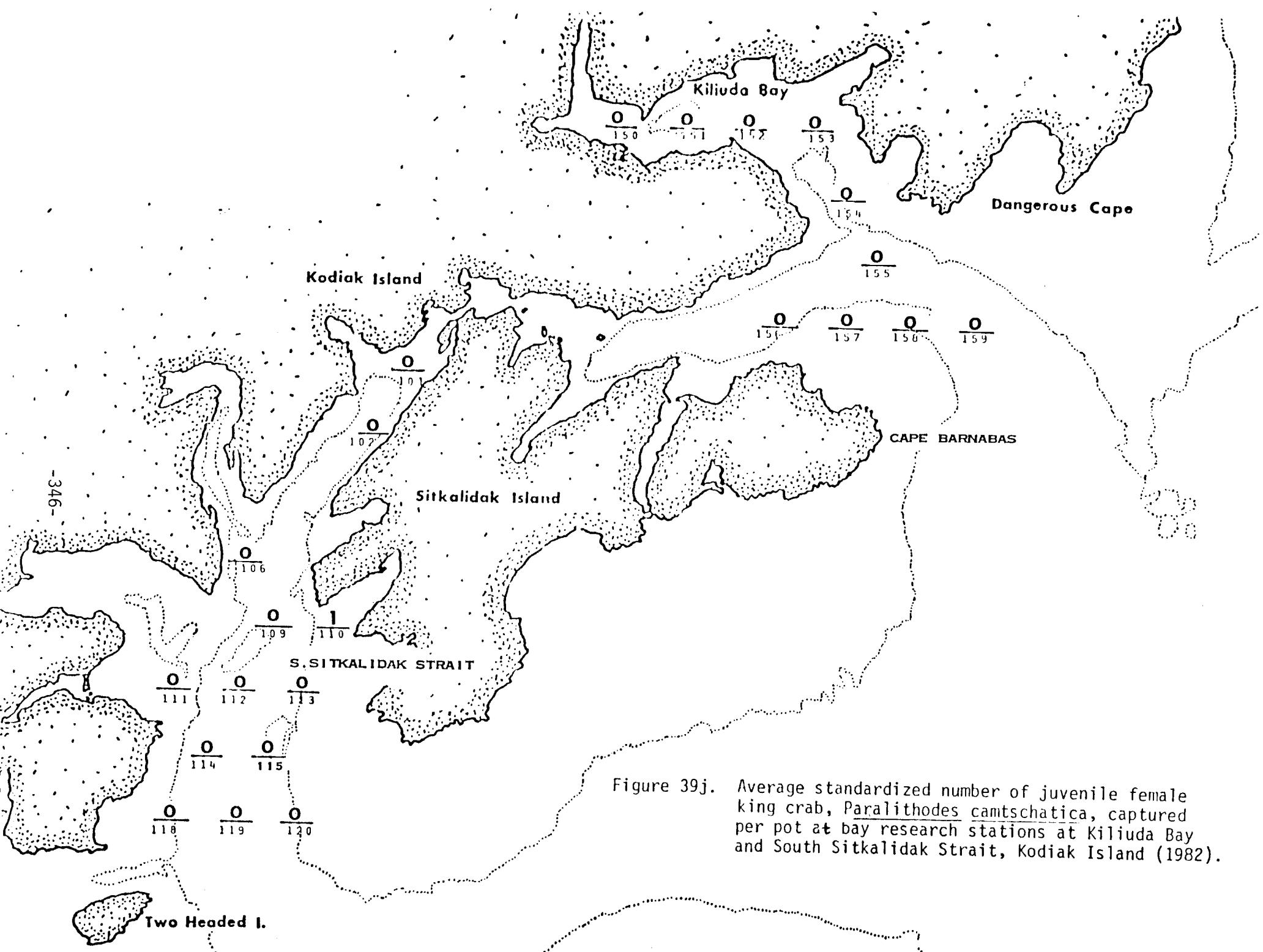


Figure 39j. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1982).

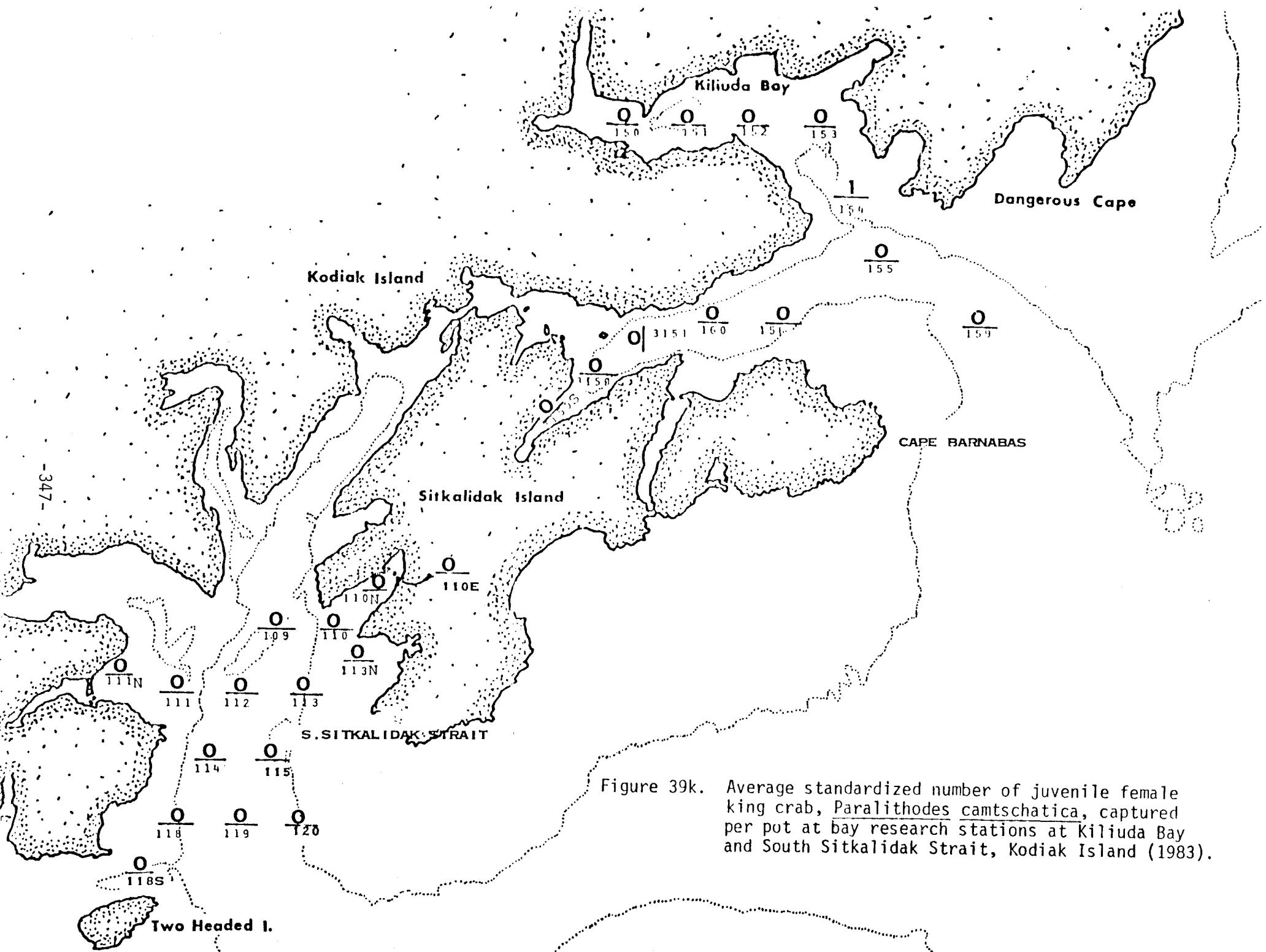


Figure 39k. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1983).

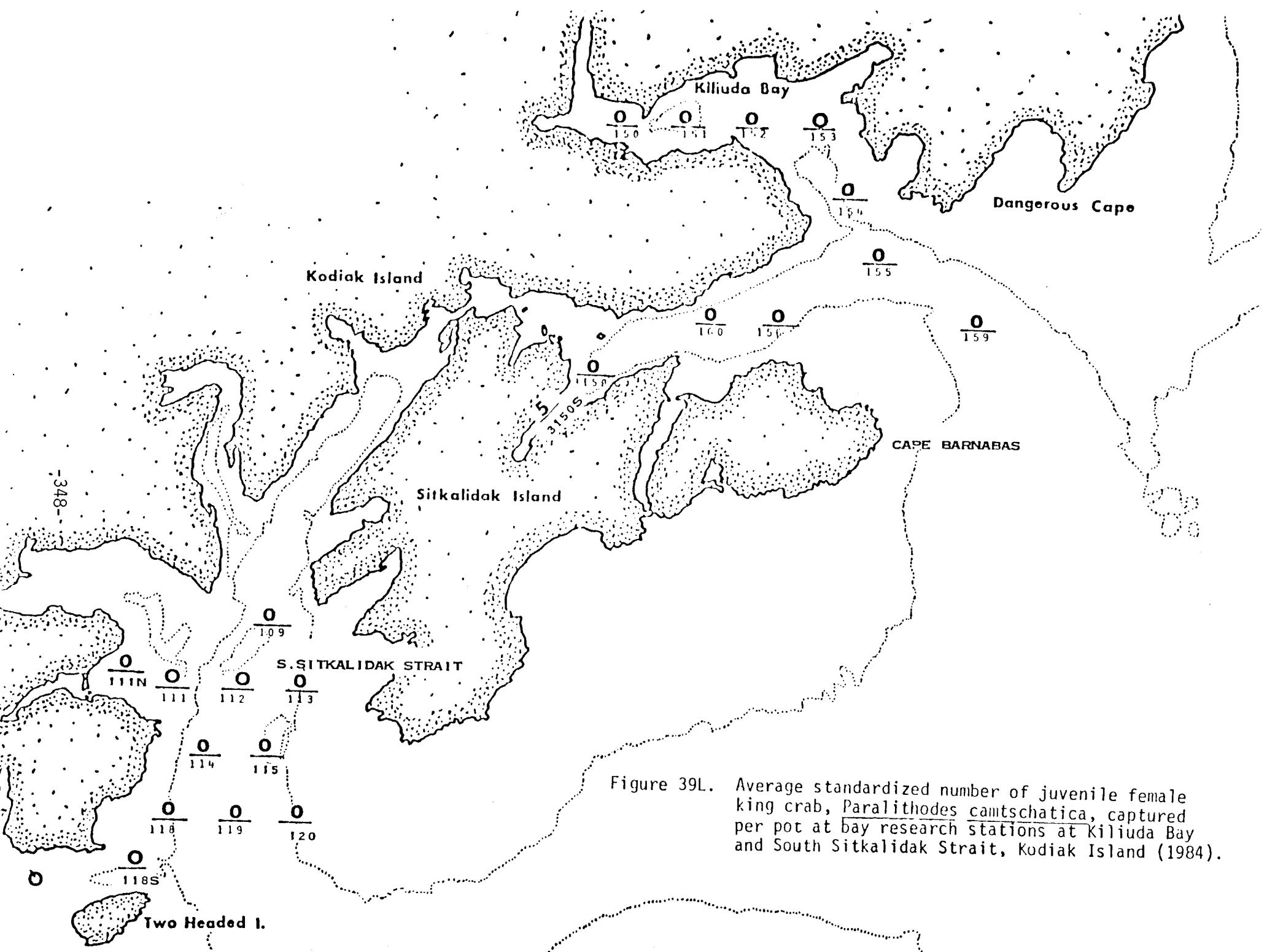


Figure 39L. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1984).

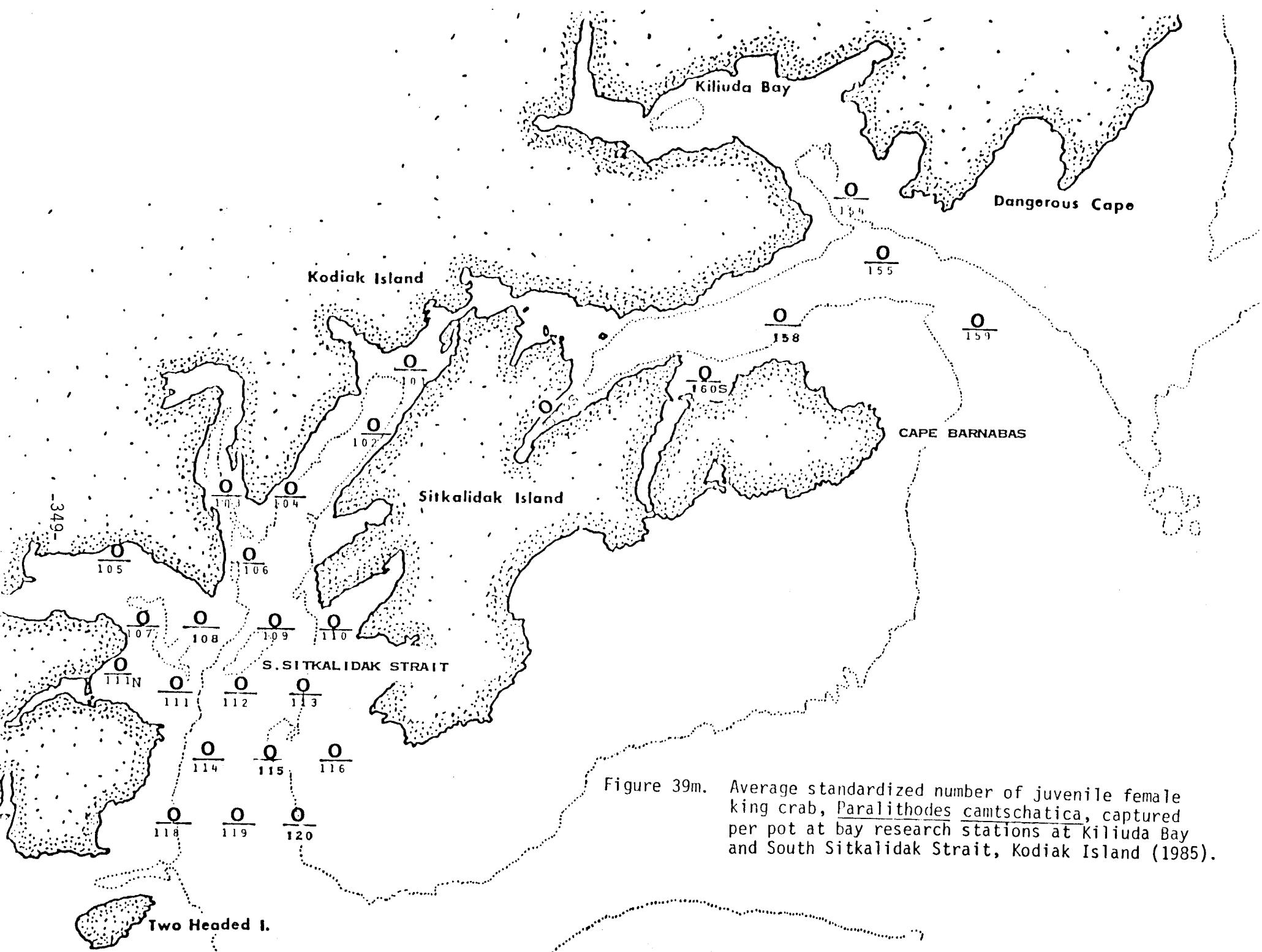


Figure 39m. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kiliuda Bay and South Sitkalidak Strait, Kodiak Island (1985).

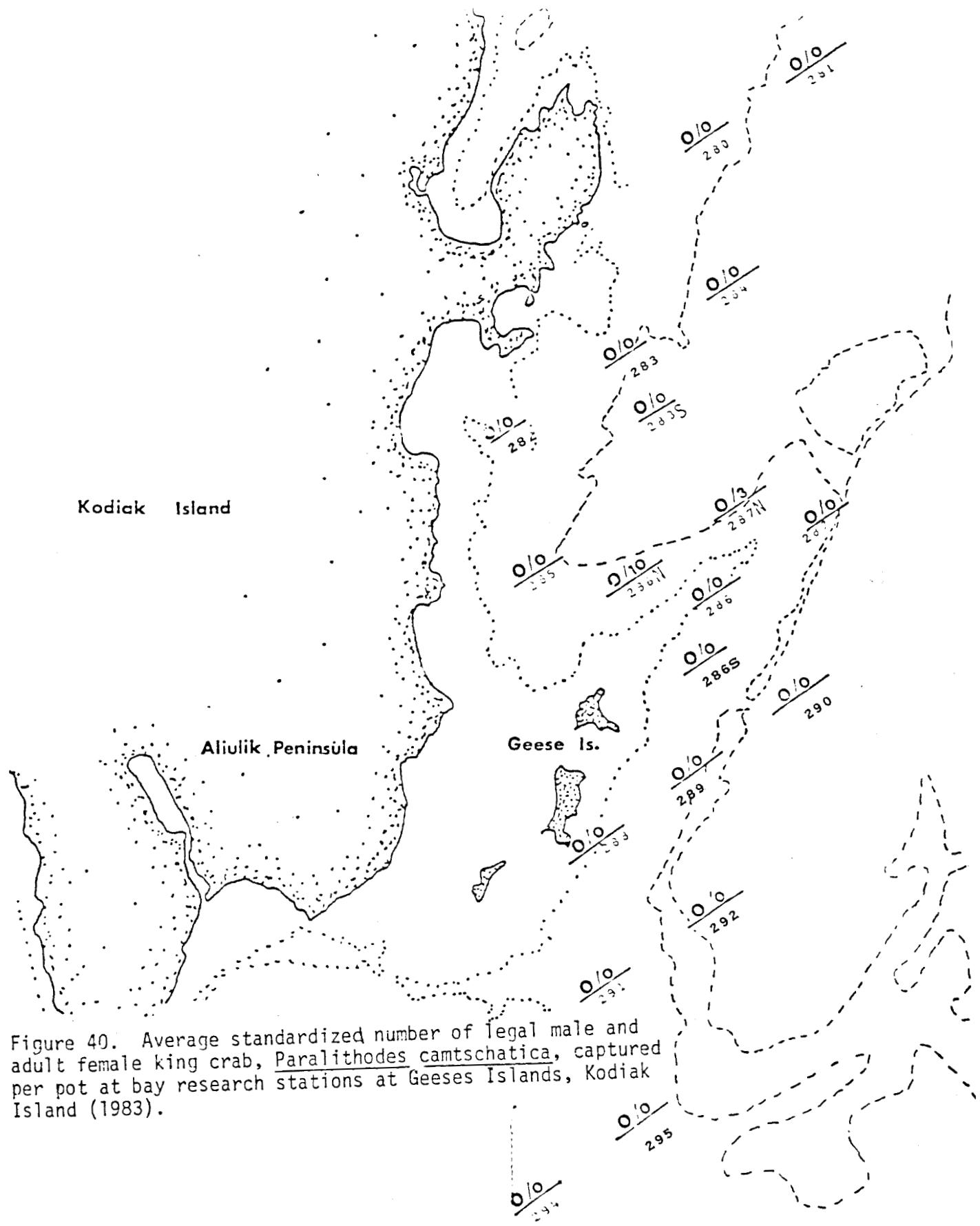


Figure 40. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Geeses Islands, Kodiak Island (1983).

Presented as: Legal males/Adult females

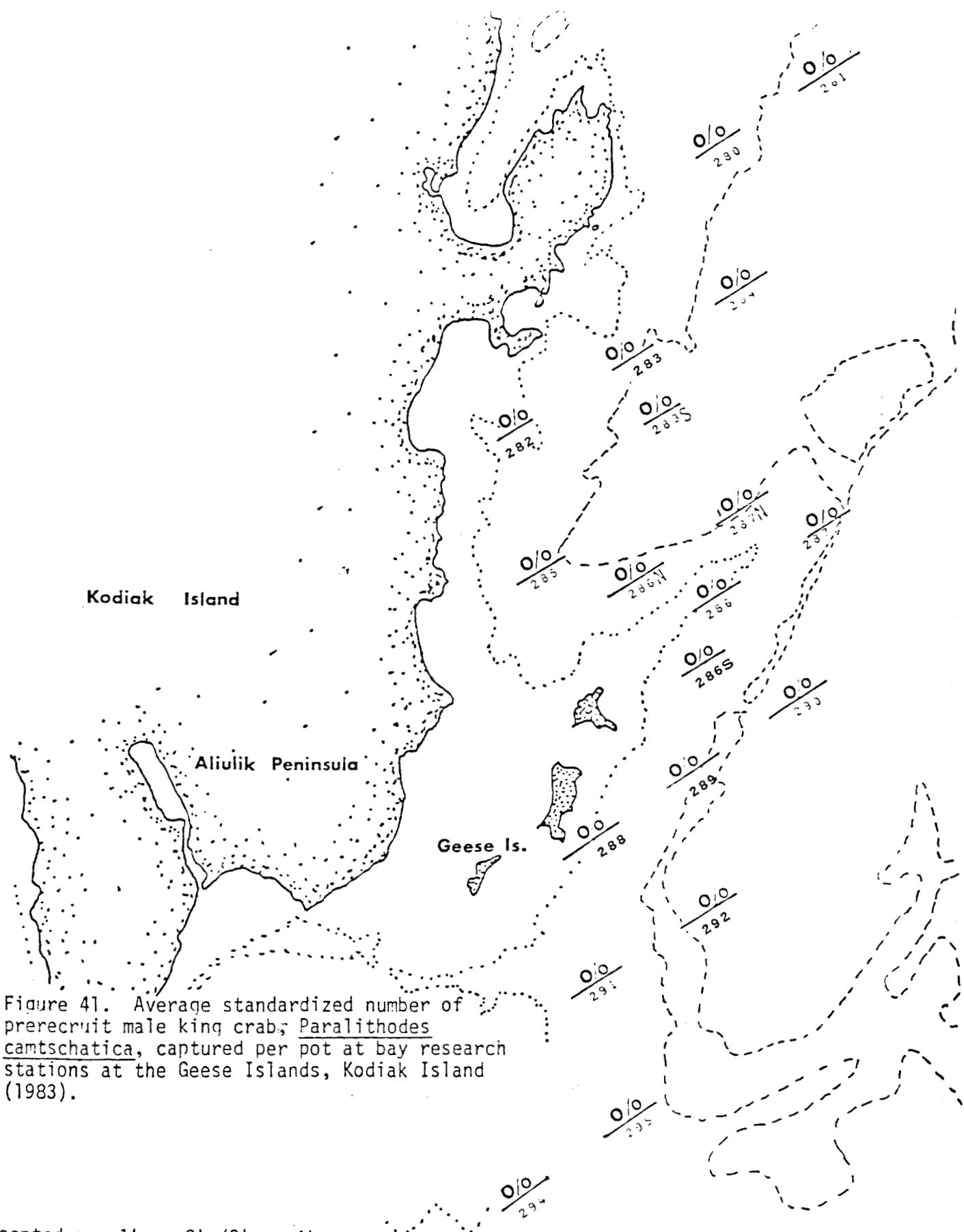


Figure 41. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at the Geese Islands, Kodiak Island (1983).

Presented as: 1's + 2's/3's + 4's

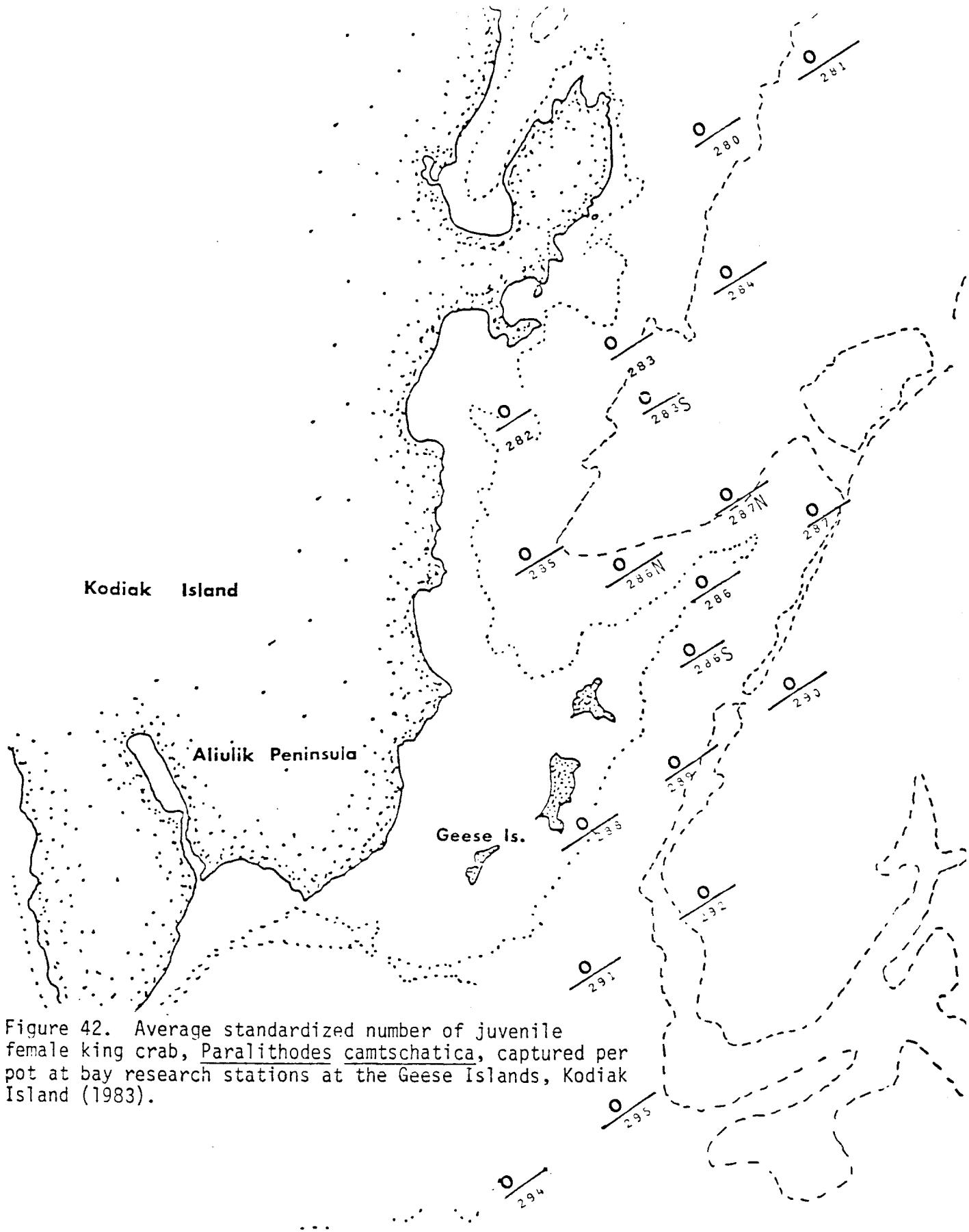


Figure 42. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at the Geese Islands, Kodiak Island (1983).

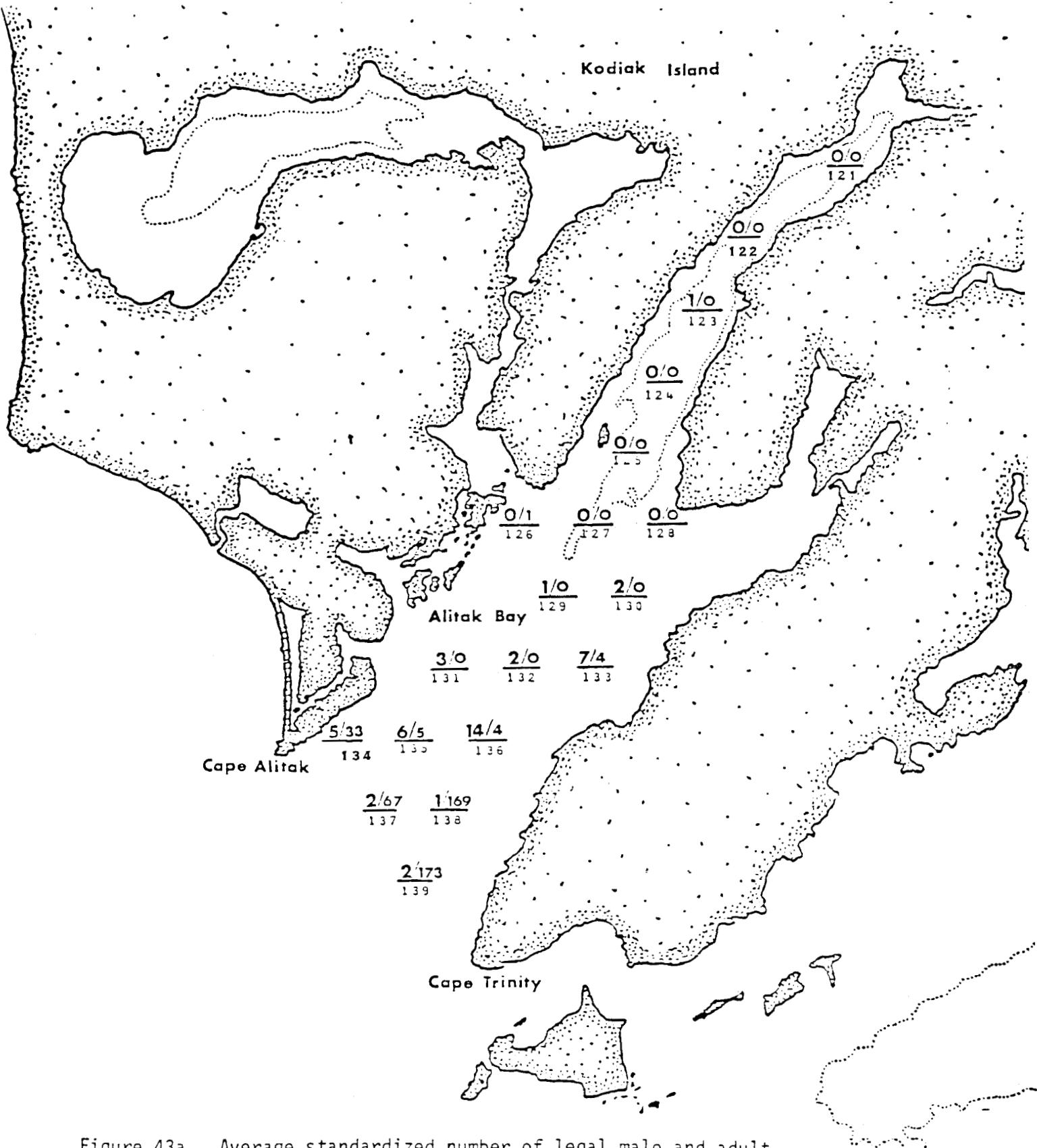


Figure 43a. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1972).

Presented as: Legal males/Adult females

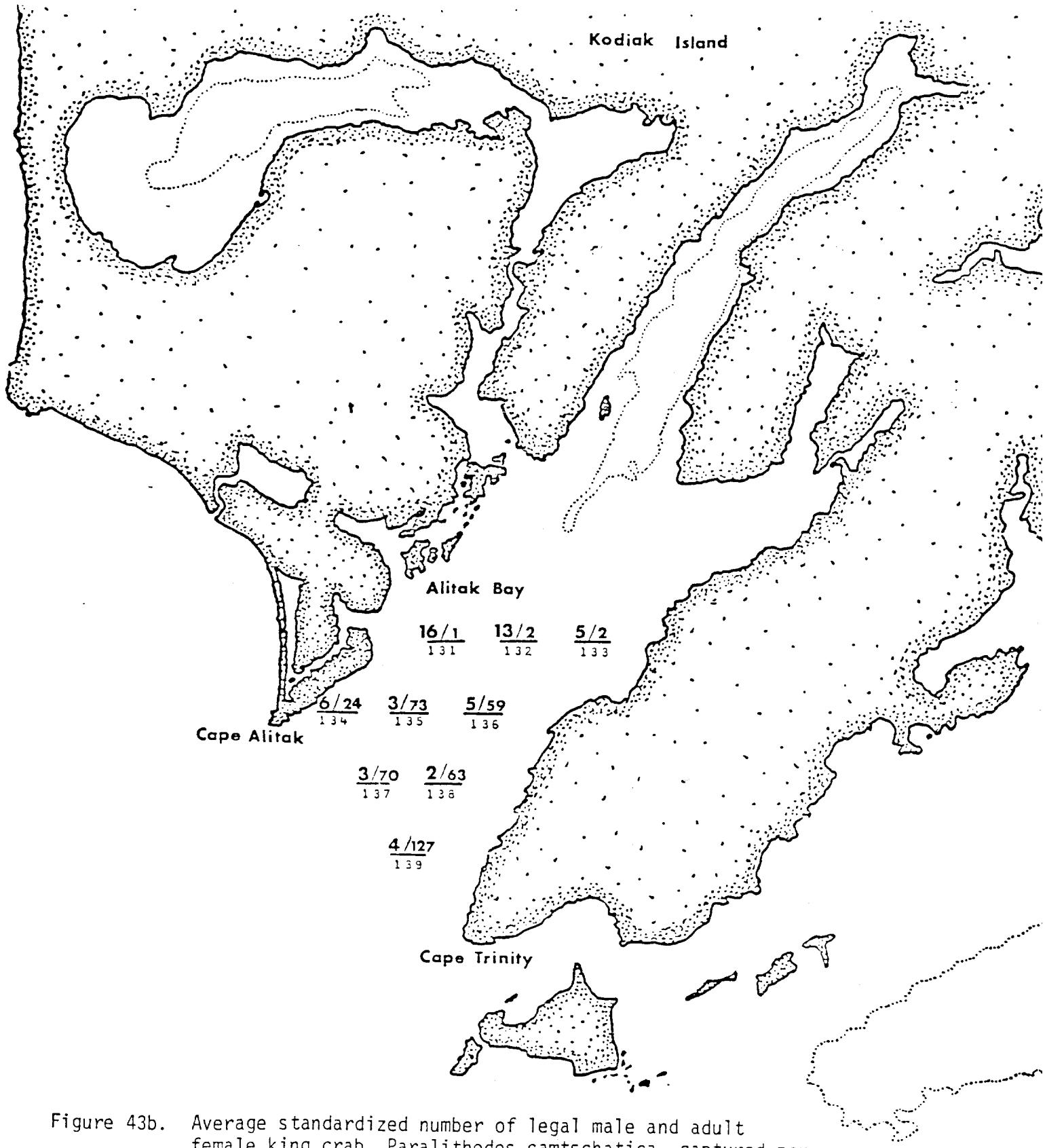


Figure 43b. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1973).

Presented as: Legal males/Adult females

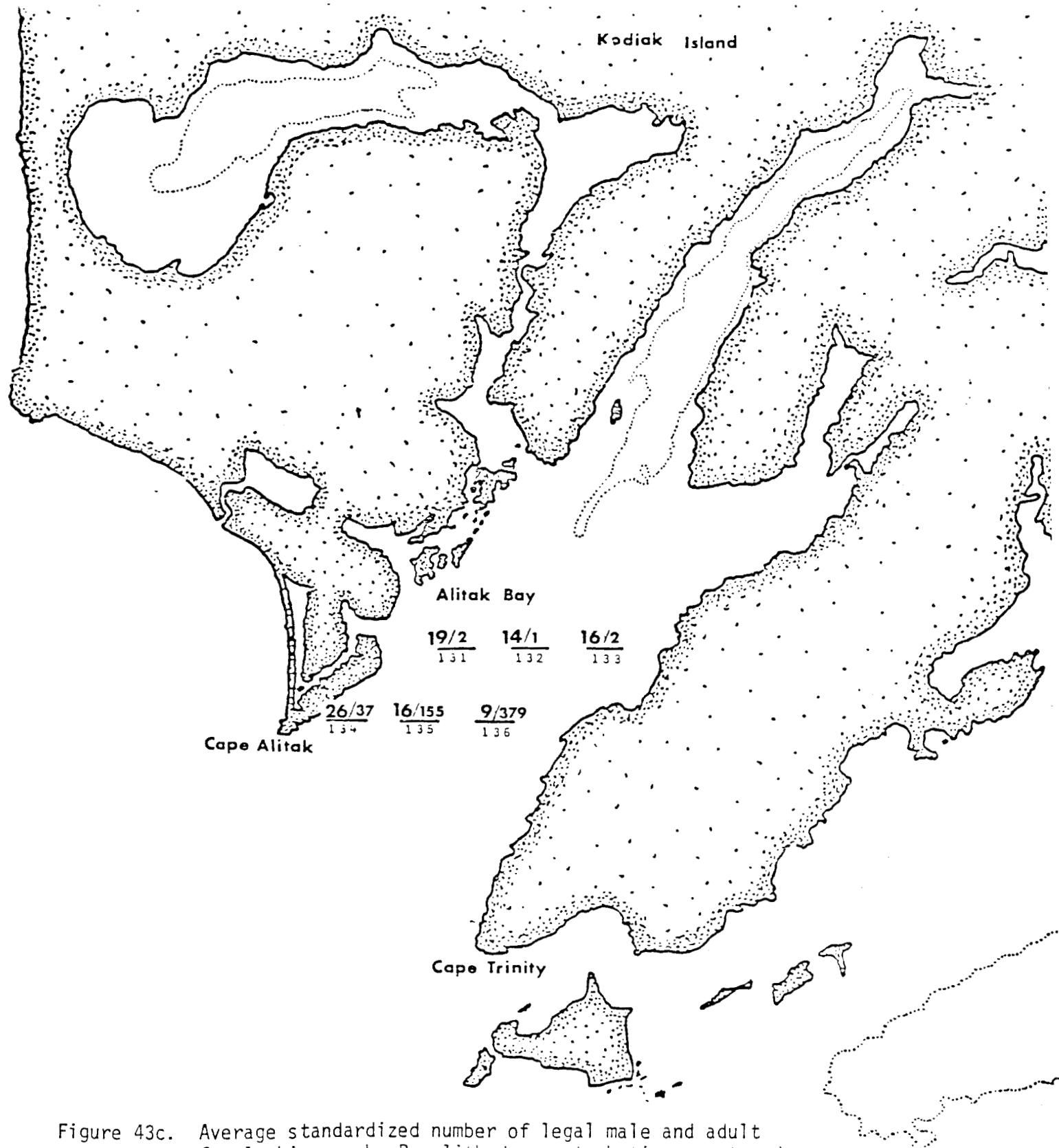


Figure 43c. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1974).

Presented as: Legal males/Adult females

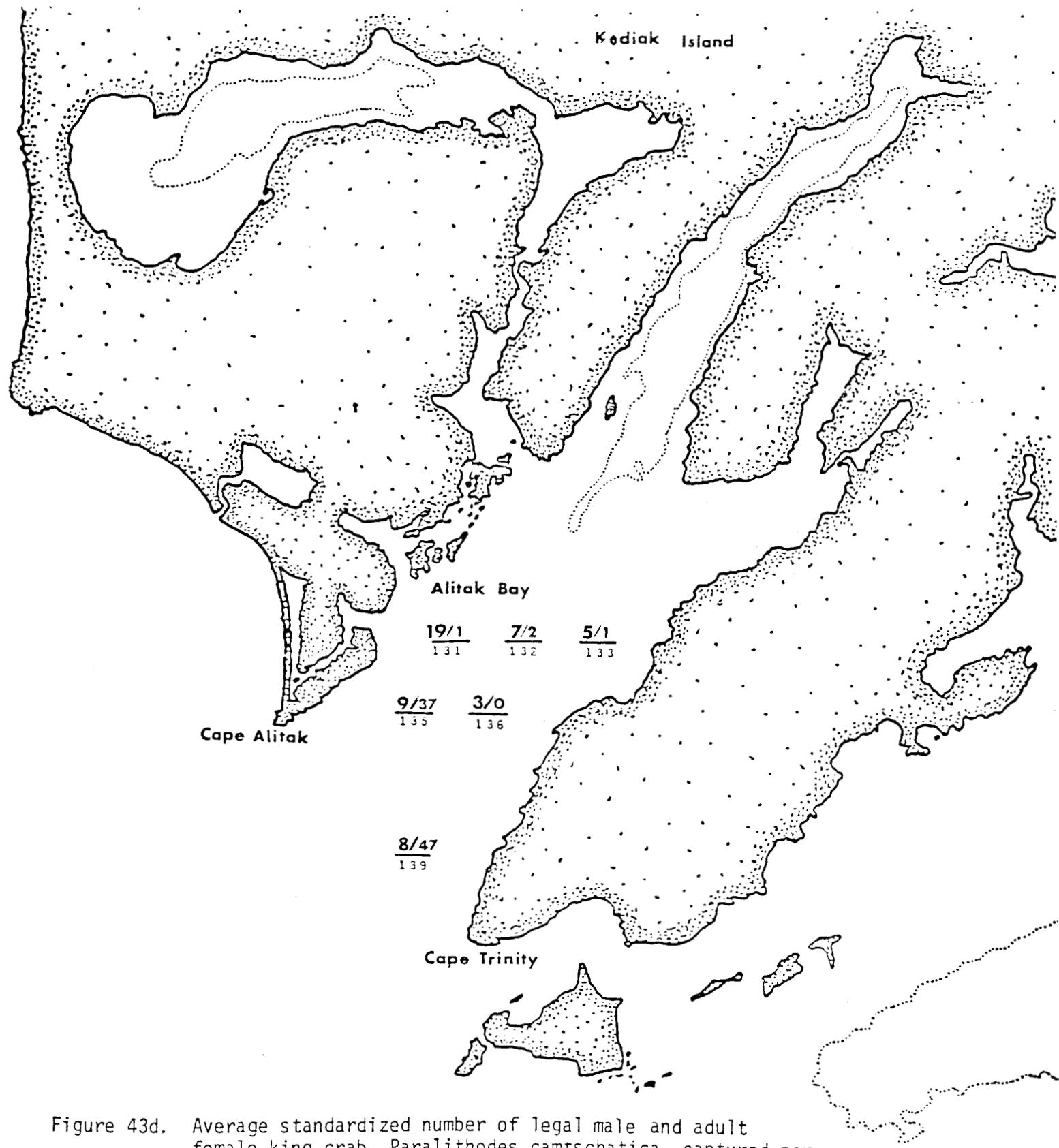


Figure 43d. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1975).

Presented as: Legal males/Adult females

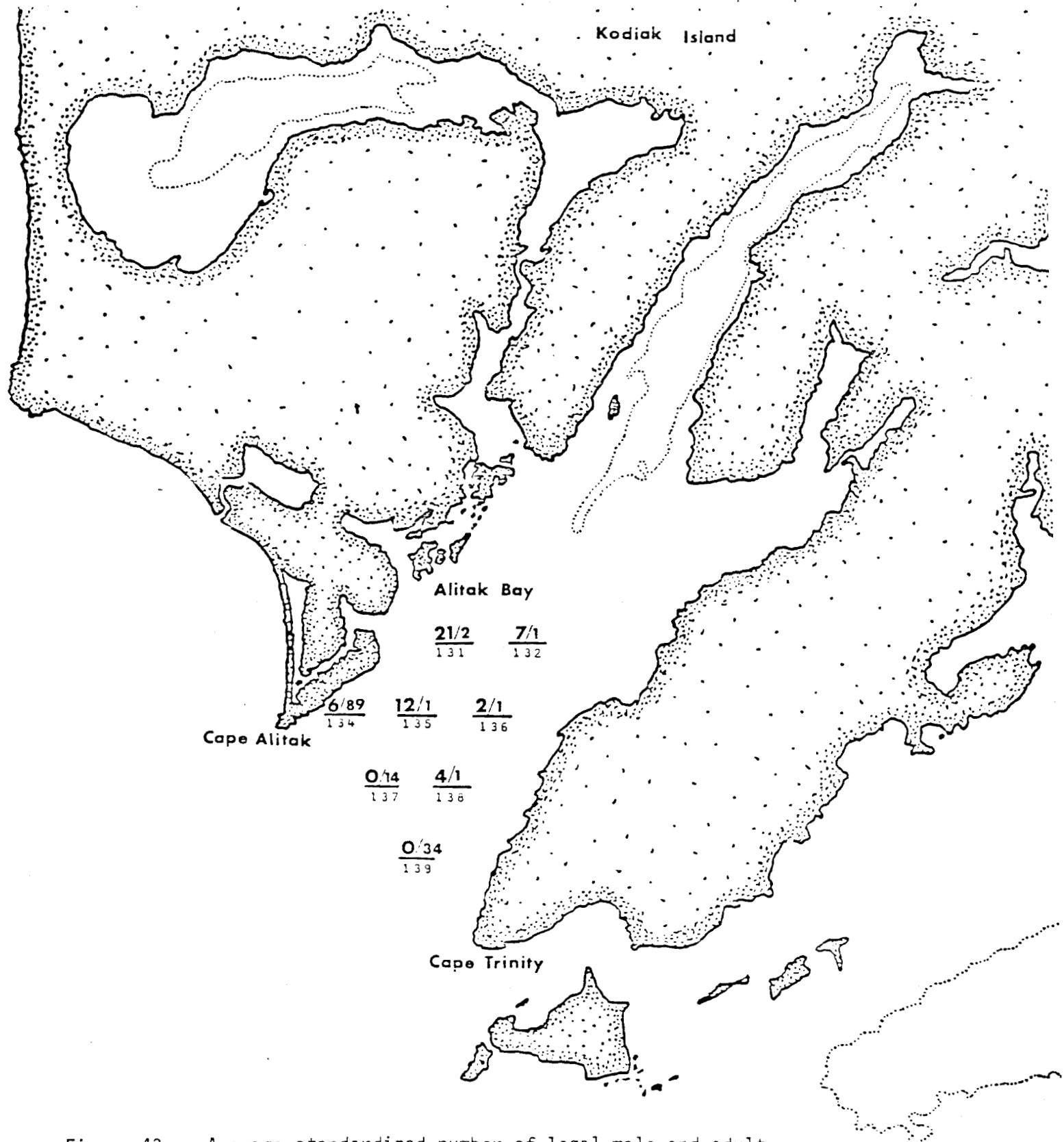


Figure 43e. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1976).  
Presented as: Legal males/Adult females

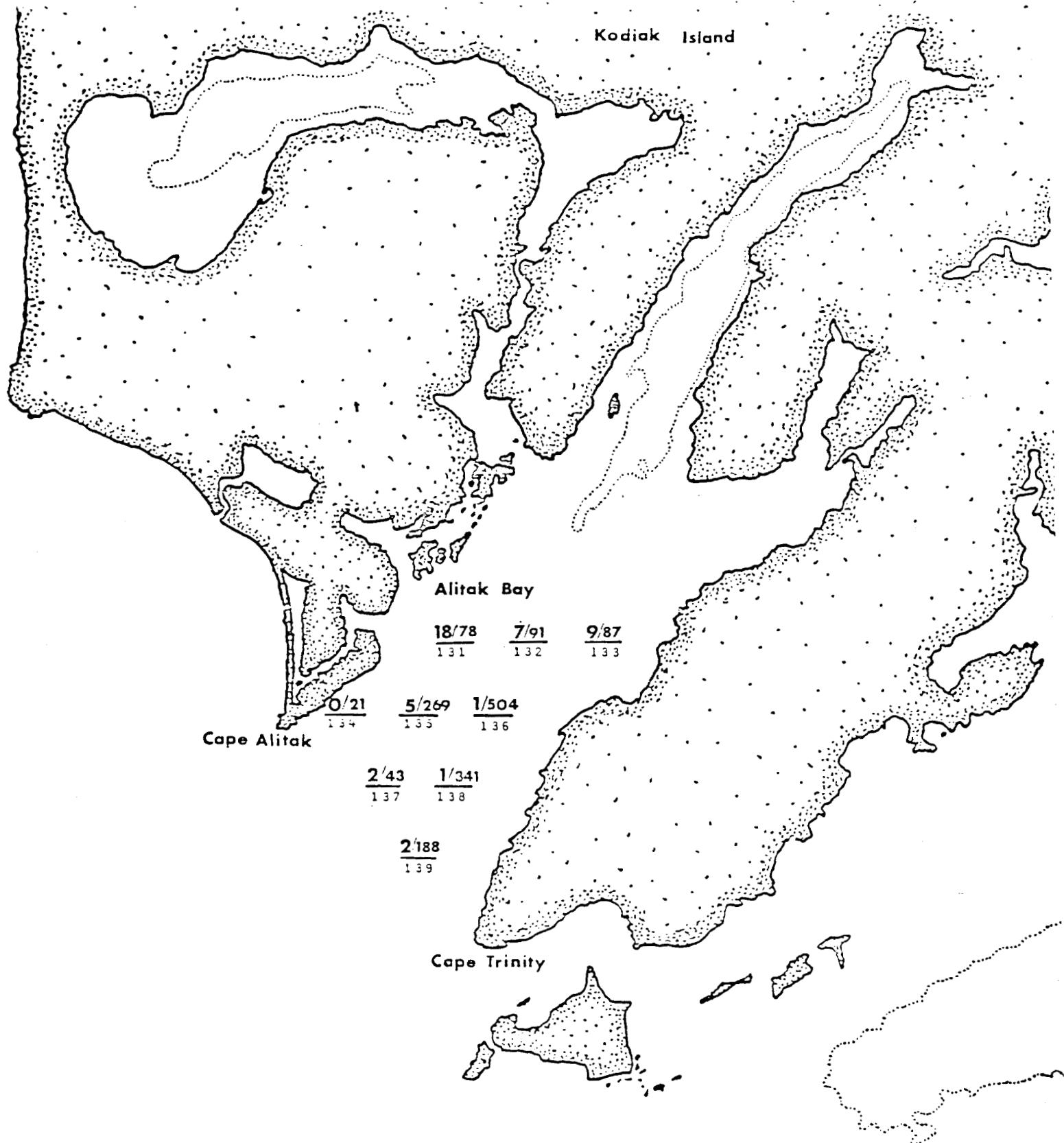


Figure 43f. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1977).

Presented as: Legal males/Adult females

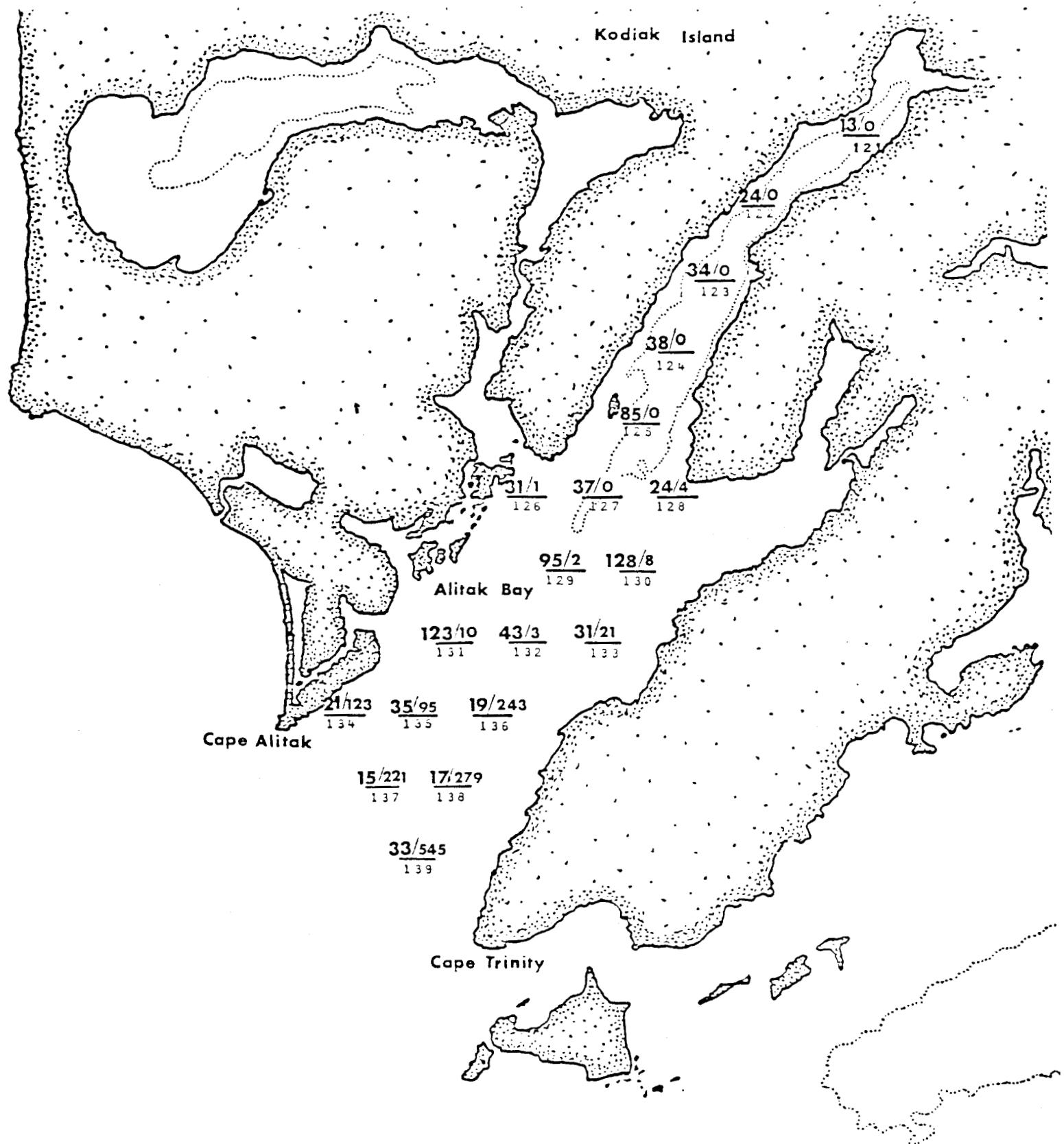


Figure 43g. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1979).

Presented as: Legal males/Adult females

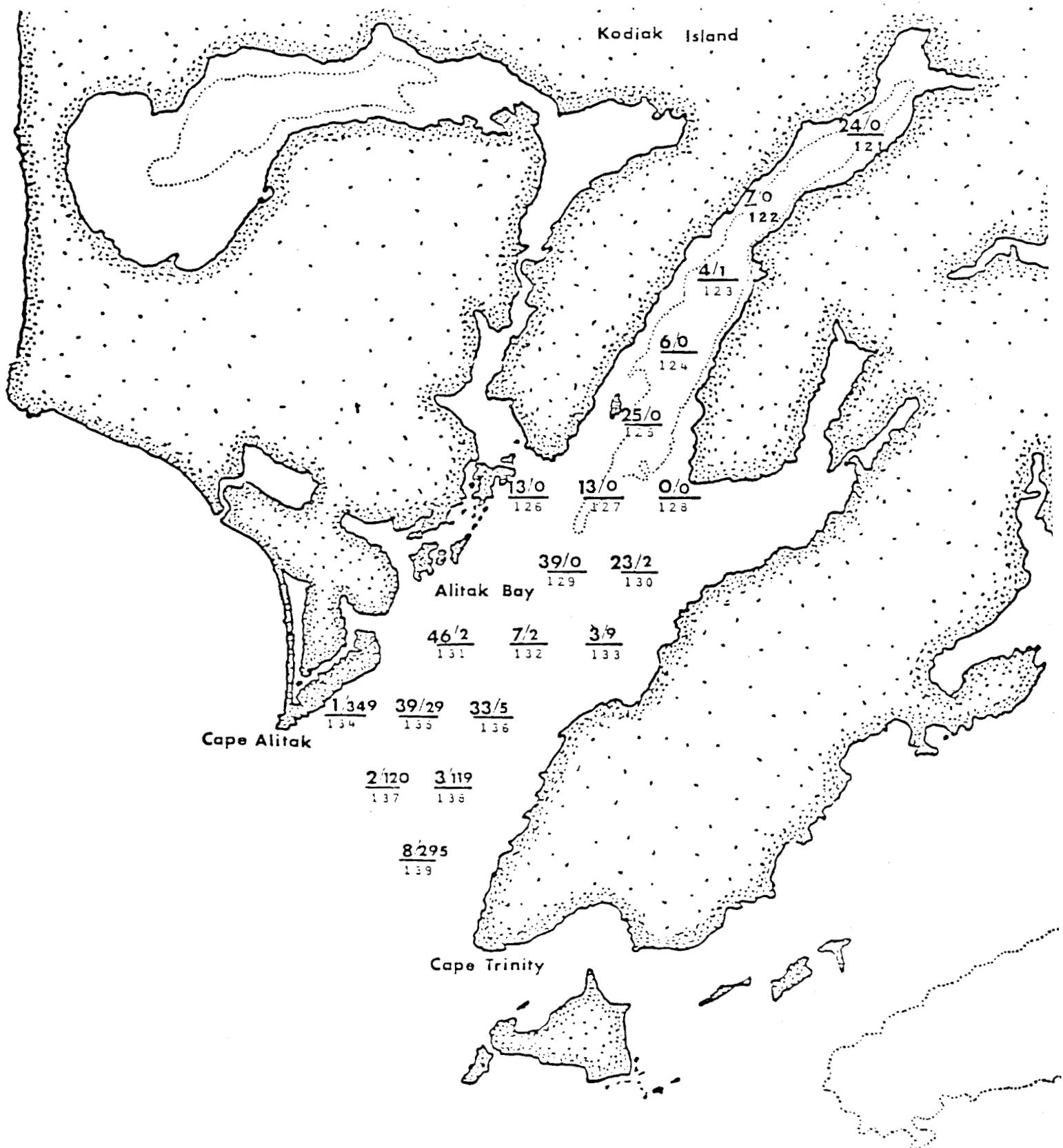


Figure 43h. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1980).

Presented as: Legal males/Adult females

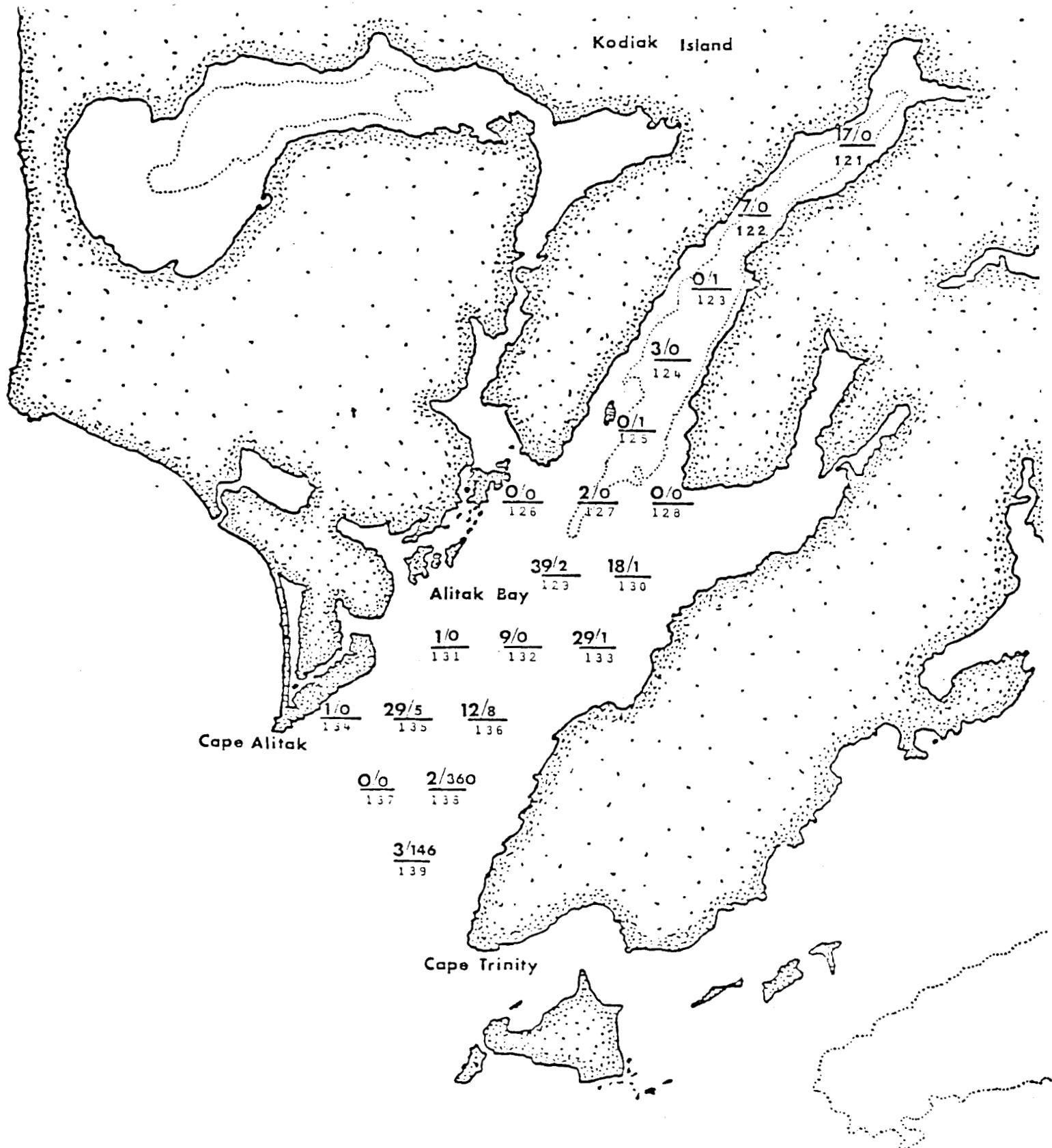


Figure 43i. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1981).

Presented as: Legal males/Adult females

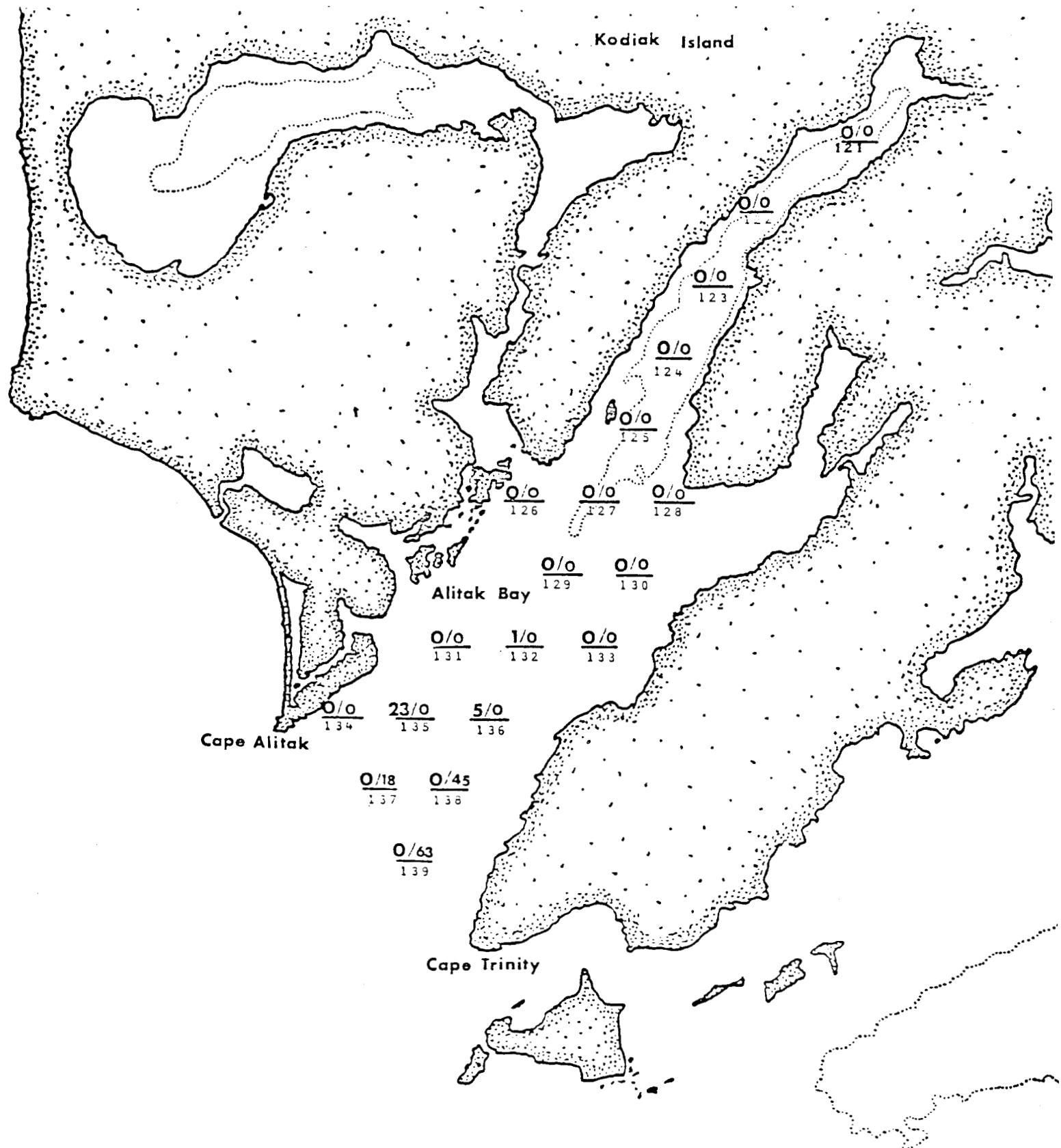


Figure 43j. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1982).

Presented as: Legal males/Adult females

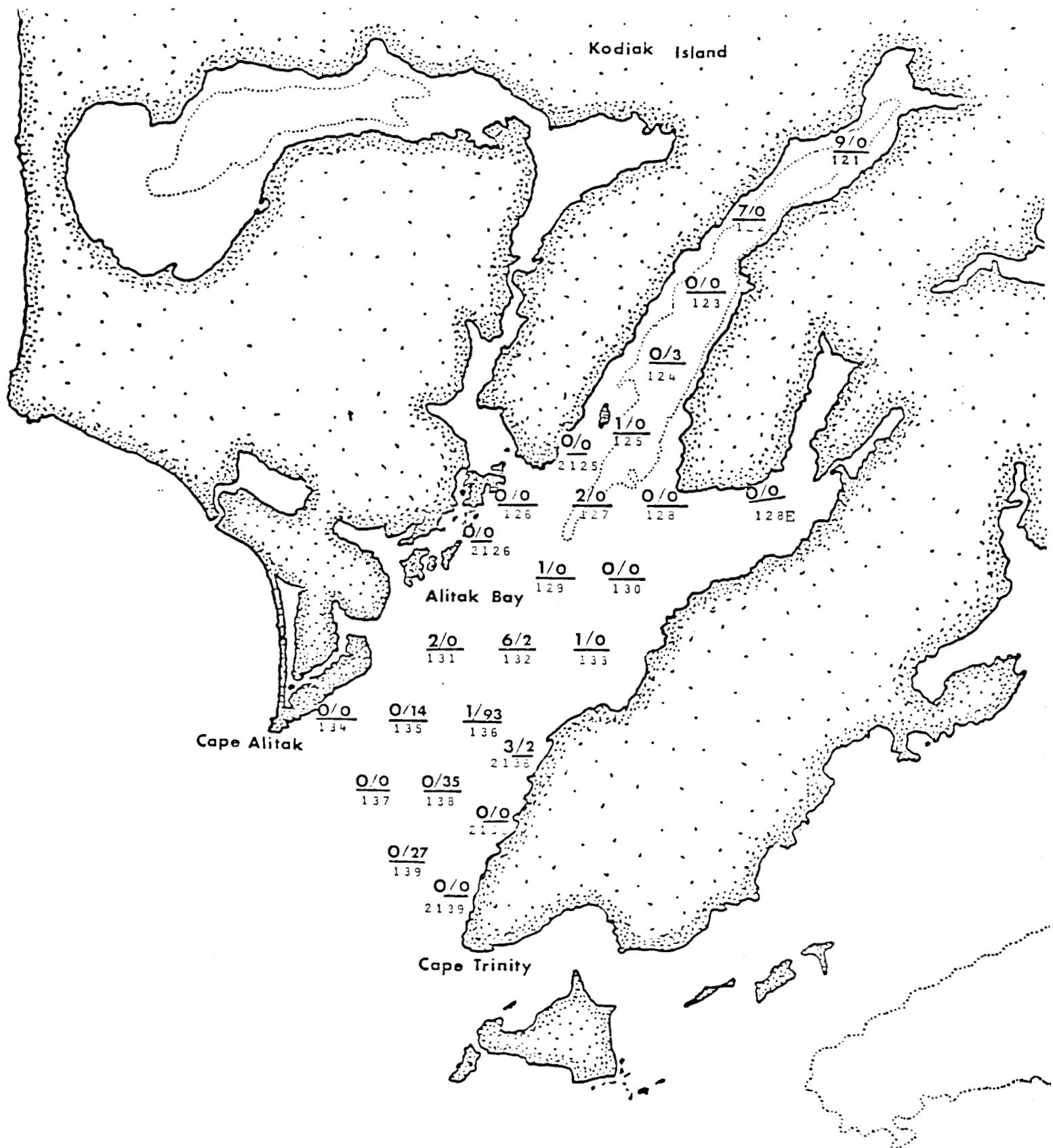


Figure 43k. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1983).

Presented as: Legal males/Adult females

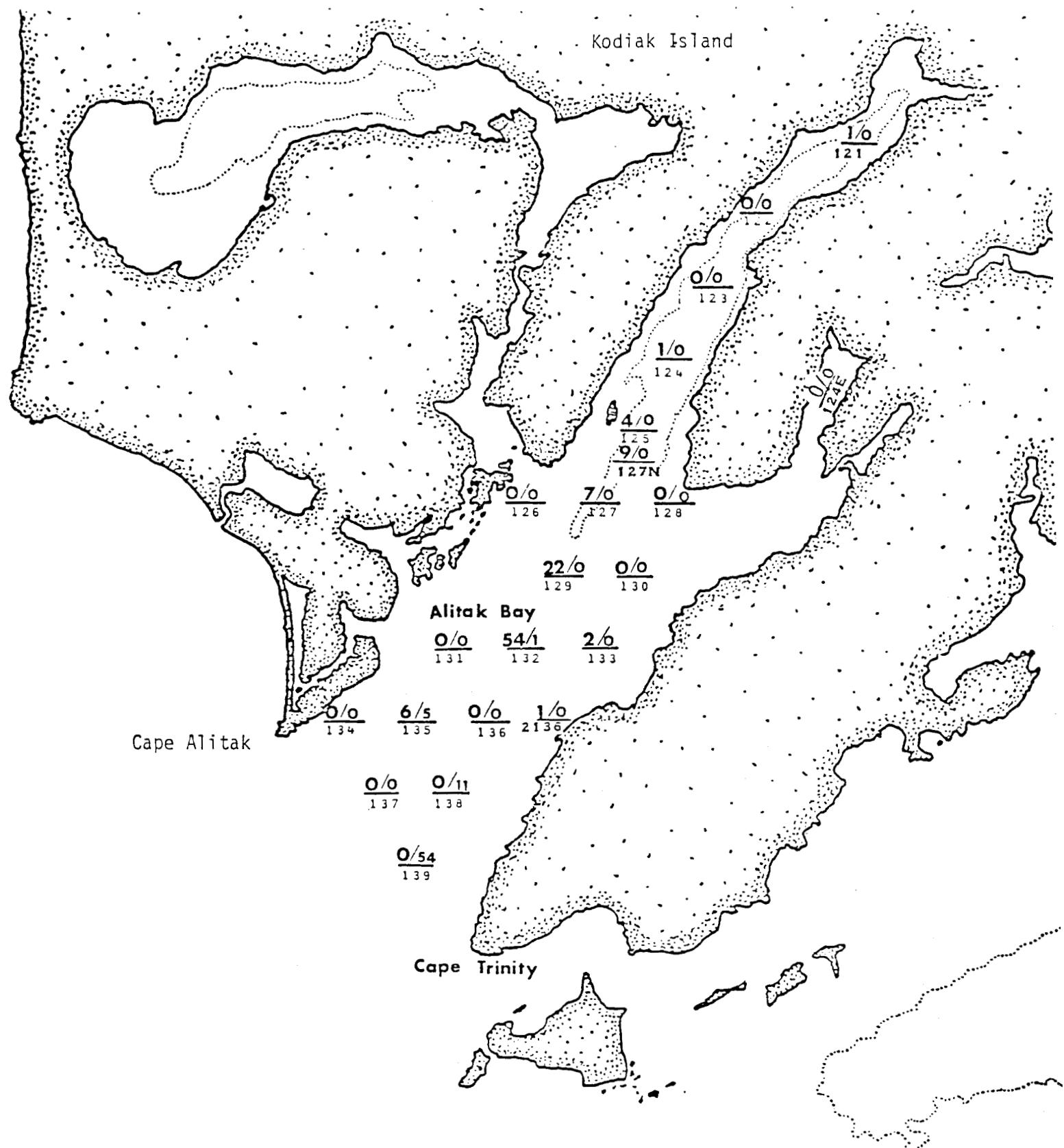


Figure 43L. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1984).

Presented as: Legal males/Adult females

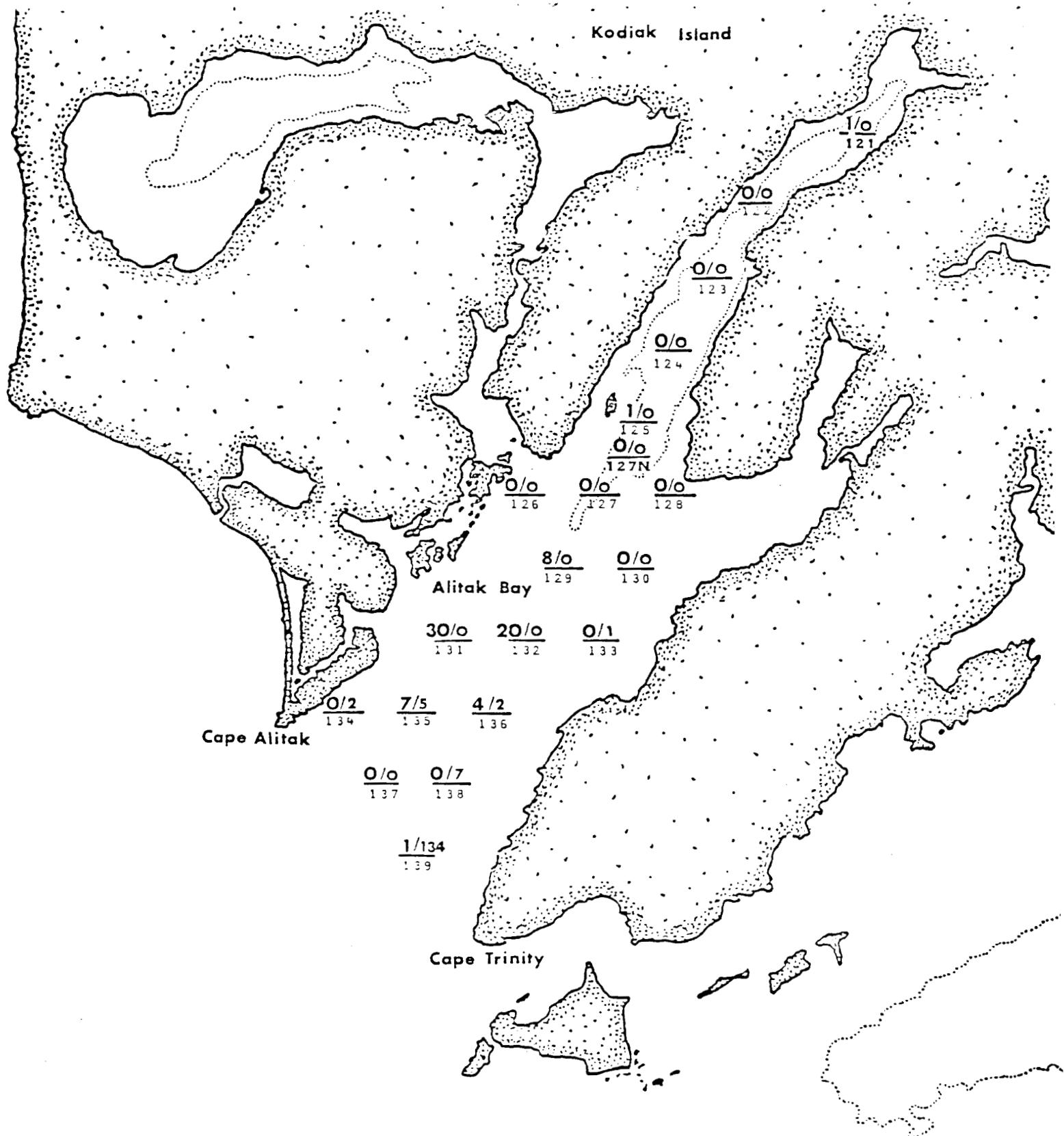


Figure 43m. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1985).

Presented as: Legal males/Adult females

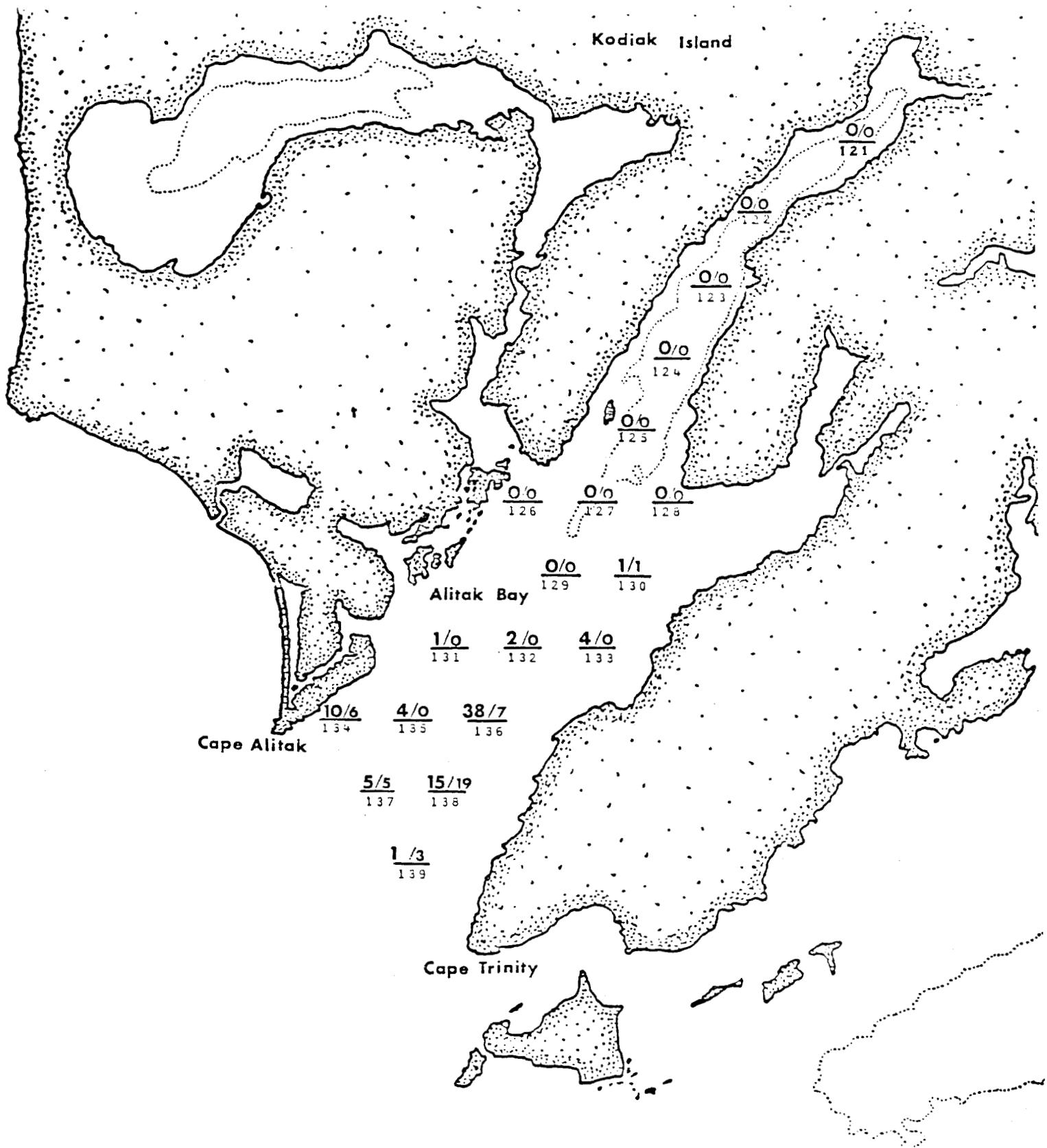


Figure 44a. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1972).

Presented as: 1's + 2's/3's + 4's

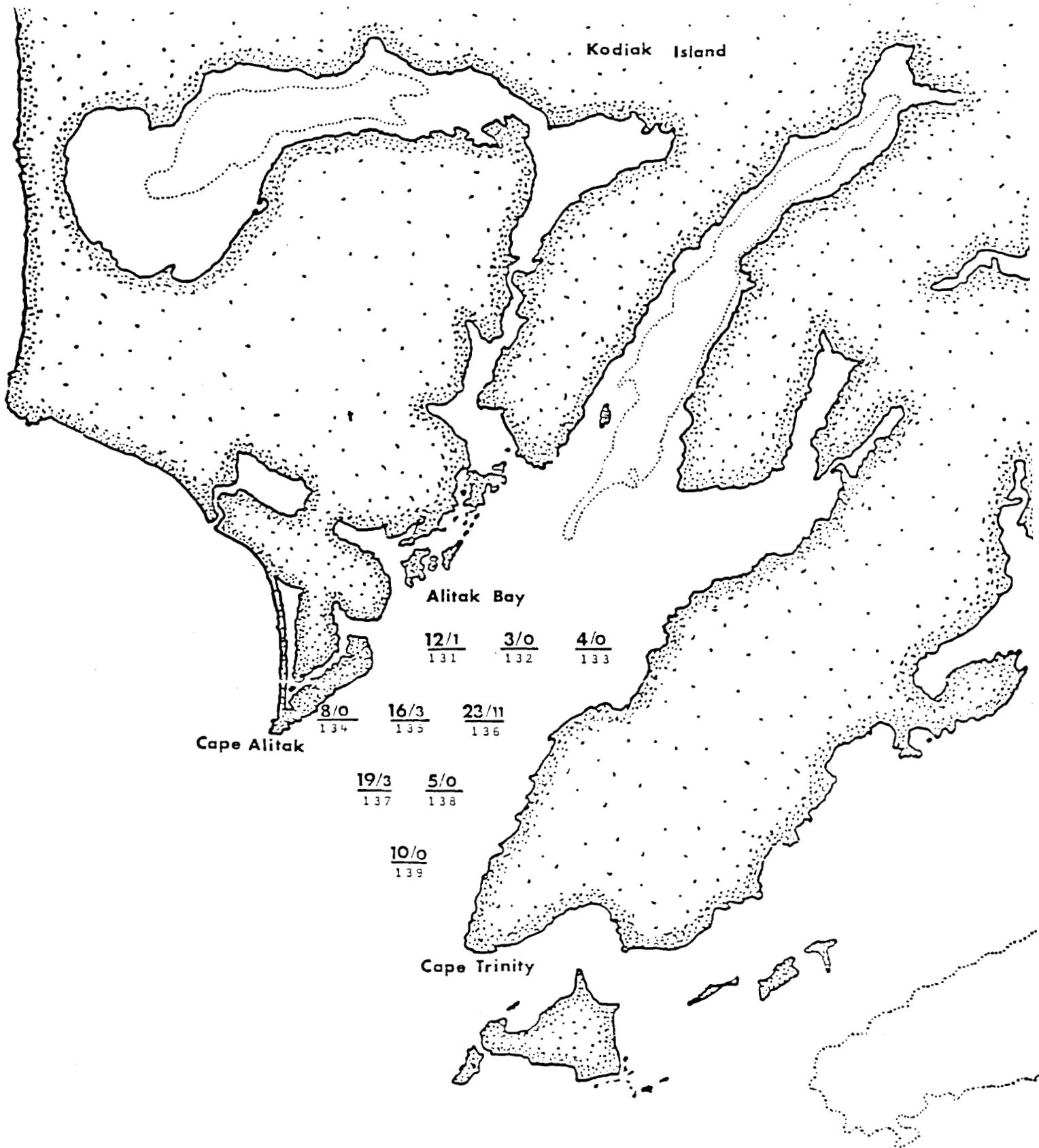


Figure 44b. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1973).

Presented as: 1's + 2's/3's + 4's

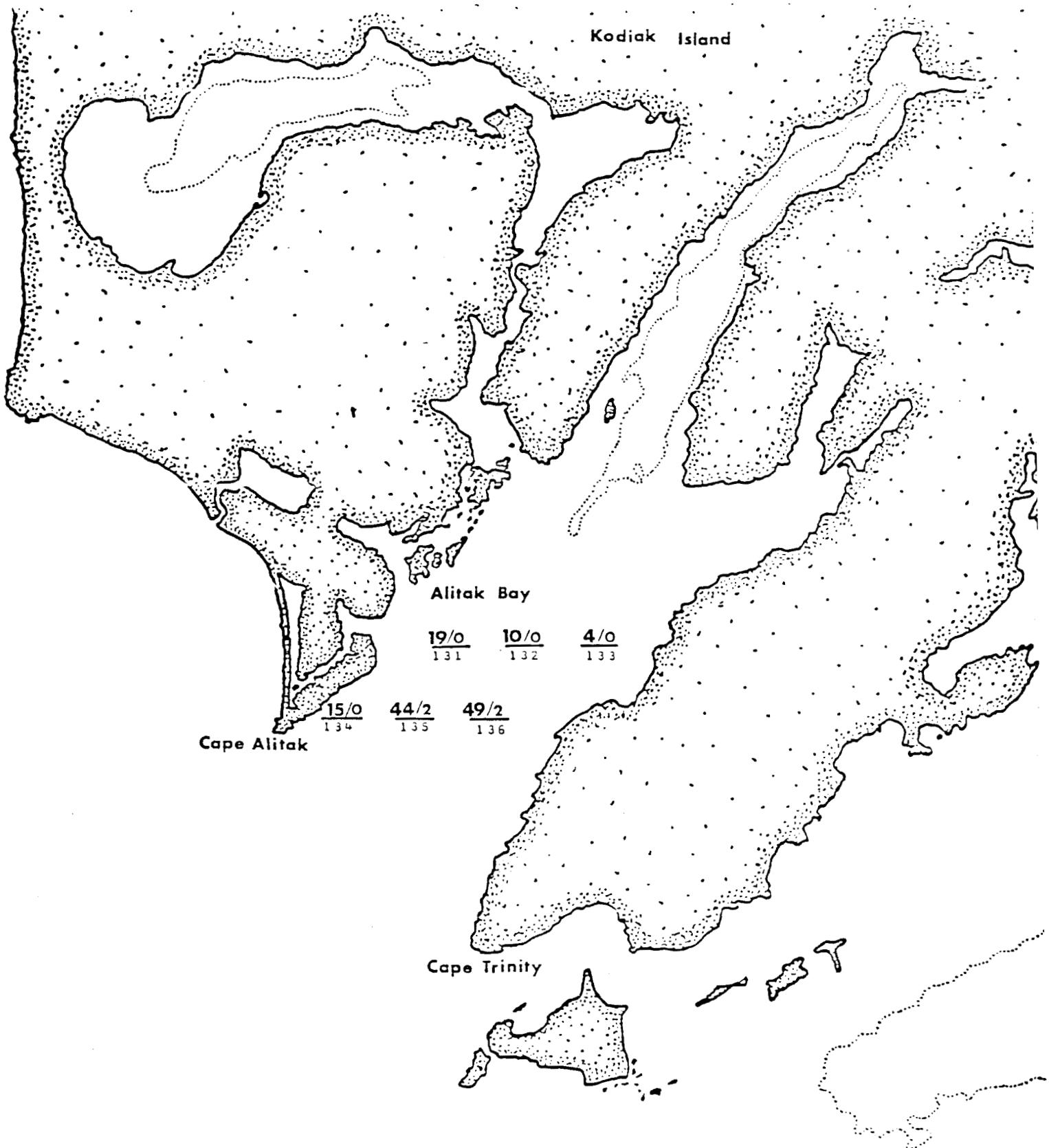


Figure 44c. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1974).

Presented as: 1's + 2's/3's + 4's

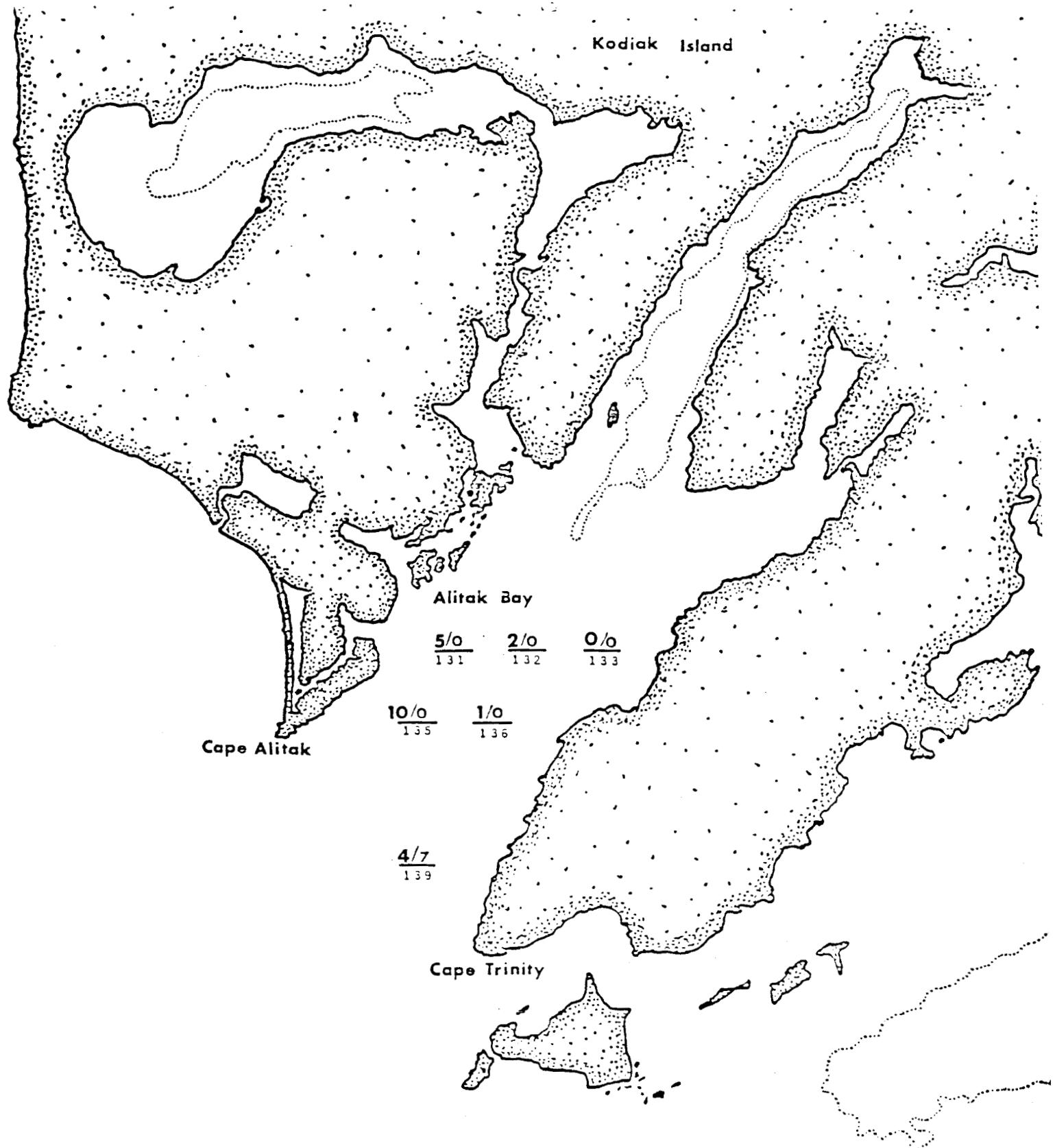


Figure 44d. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1975).

Presented as: 1's + 2's/3's + 4's

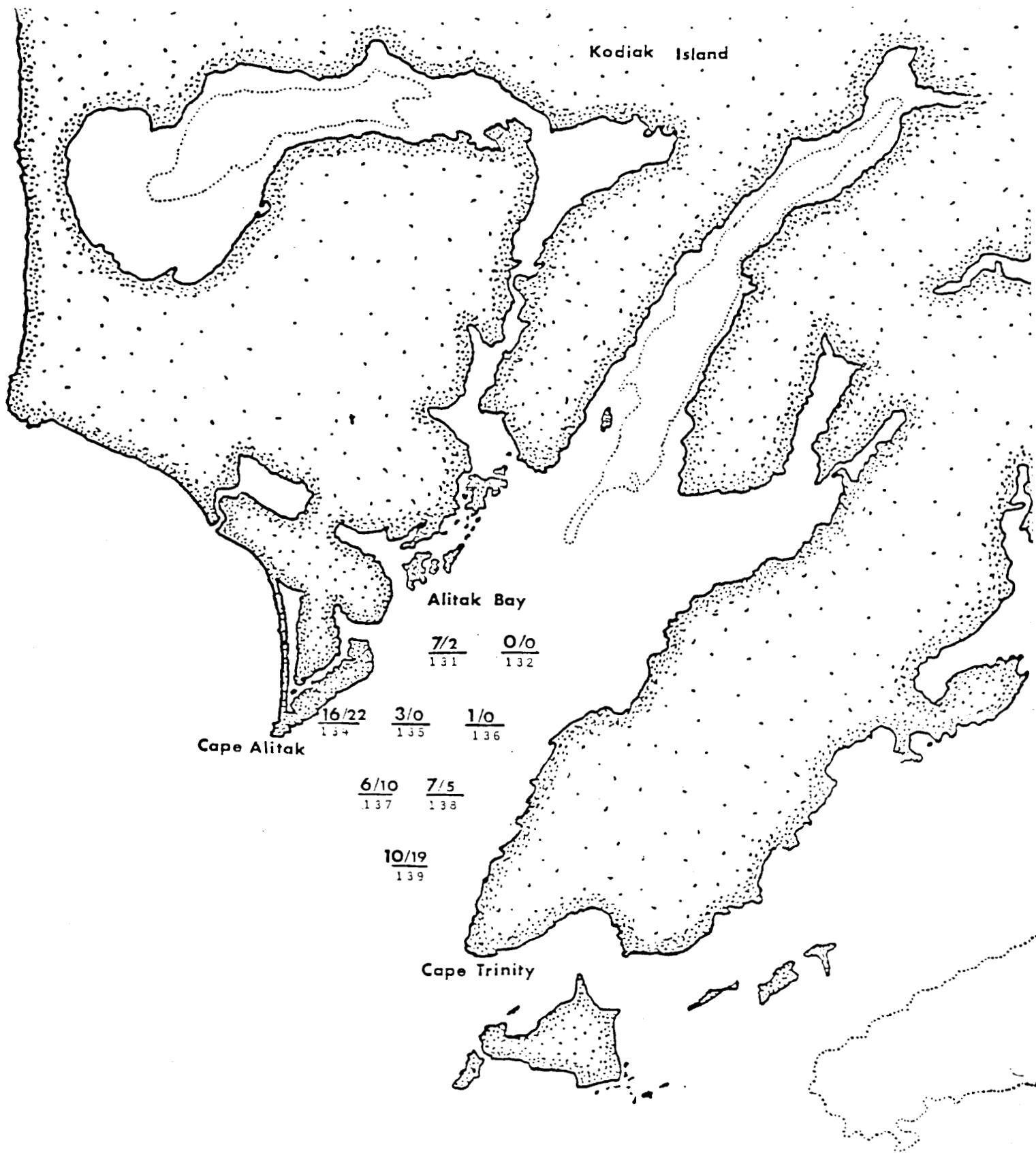


Figure 44e. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1976).

Presented as: 1's + 2's/3's + 4's

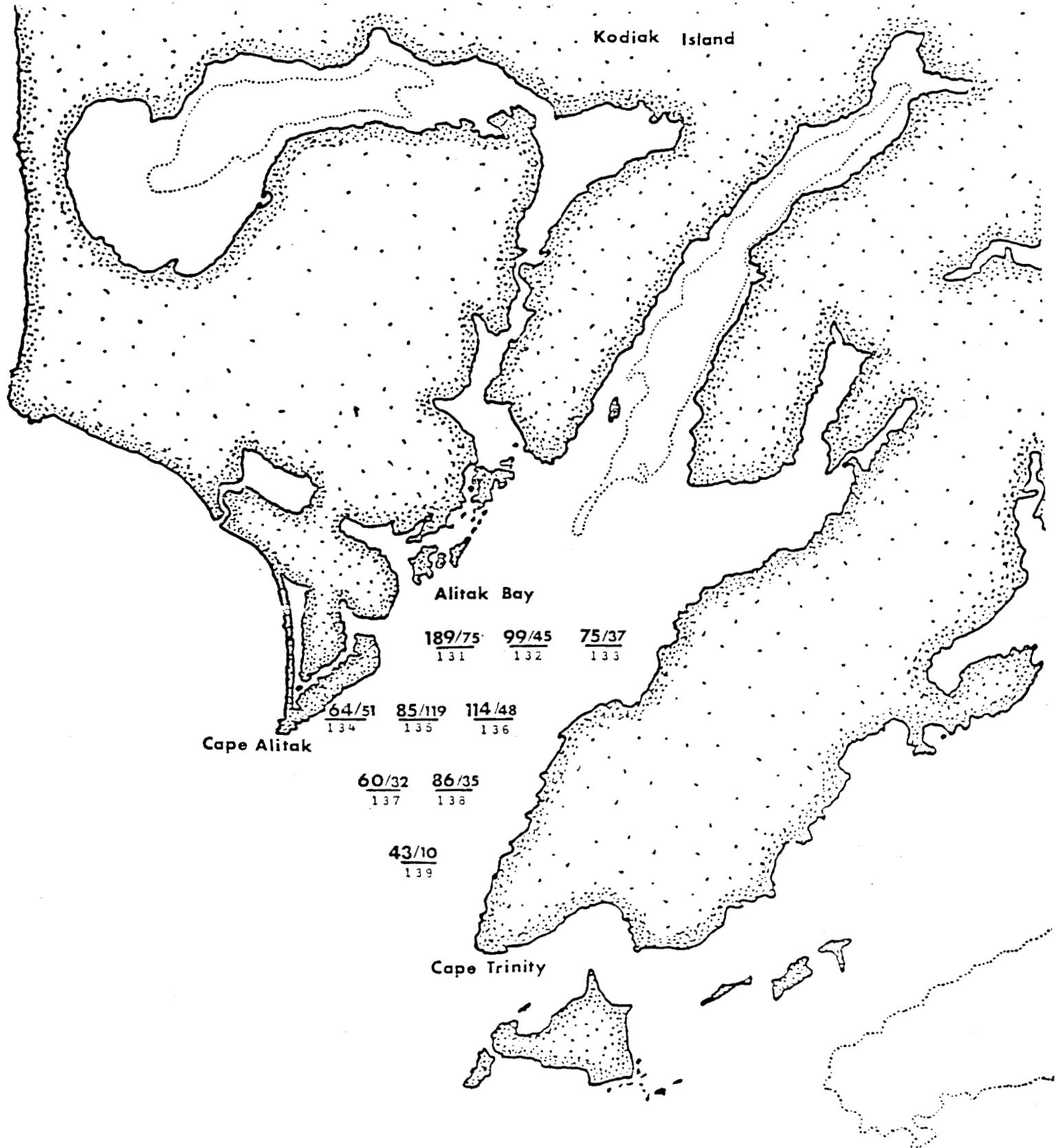


Figure 44f. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1977).

Presented as: 1's + 2's/3's + 4's

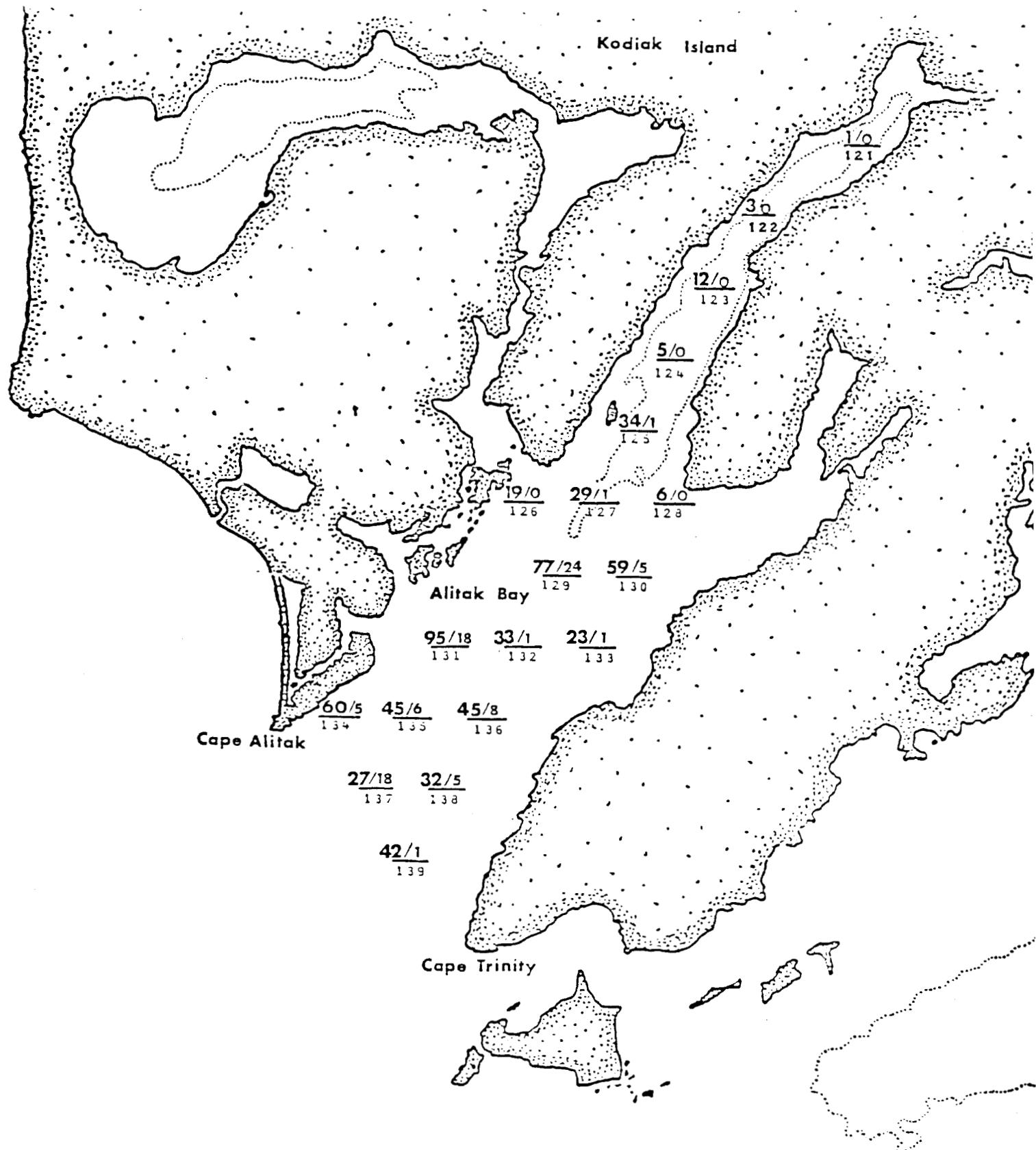


Figure 44g. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1979).

Presented as: 1's + 2's/3's + 4's

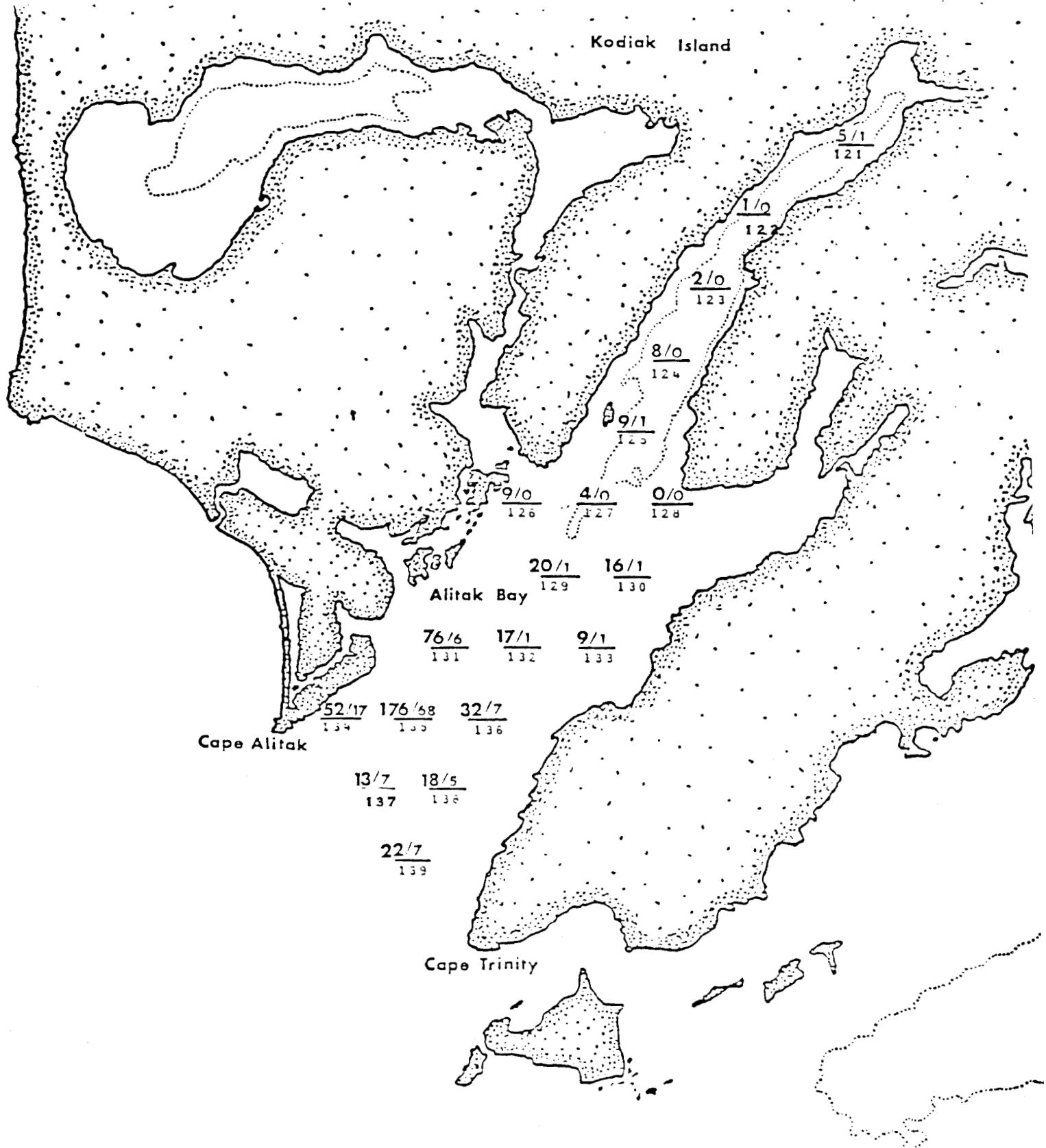


Figure 44h. Average standardized number of prae-recruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1980).

Presented as: 1's + 2's/3's + 4's

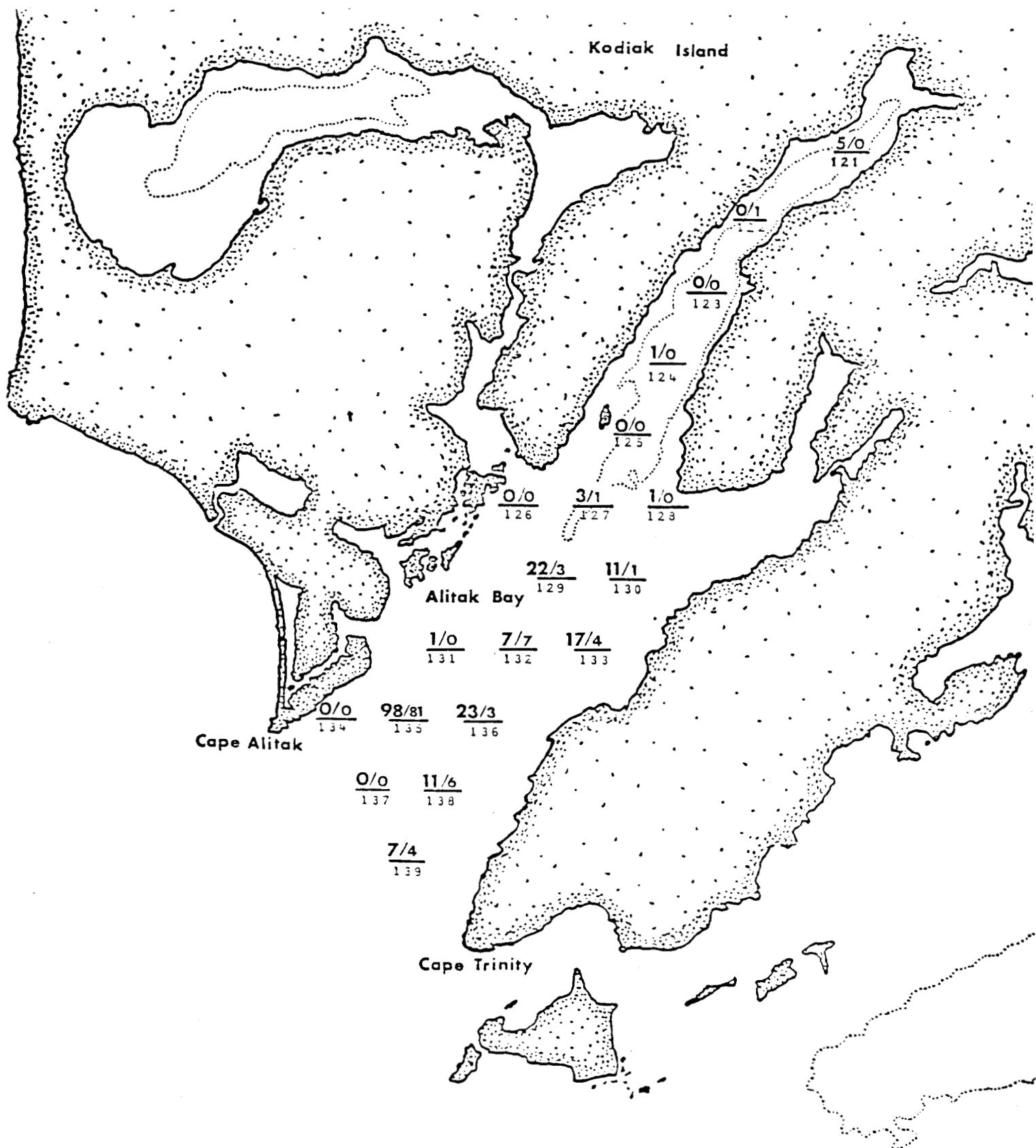


Figure 44i. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1981).

Presented as: 1's + 2's/3's + 4's

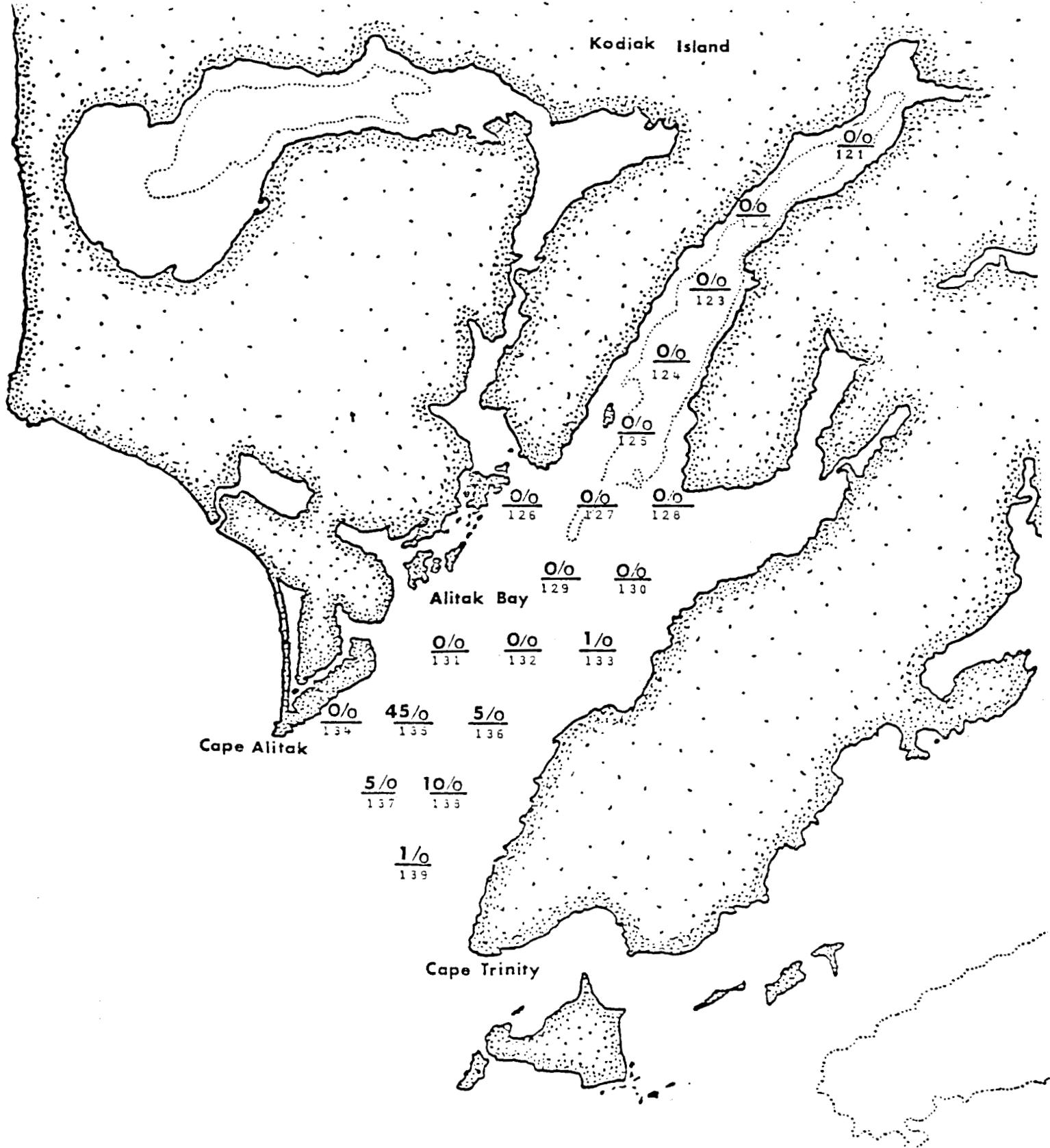


Figure 44j. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1982).

Presented as : 1's + 2's/3's + 4's

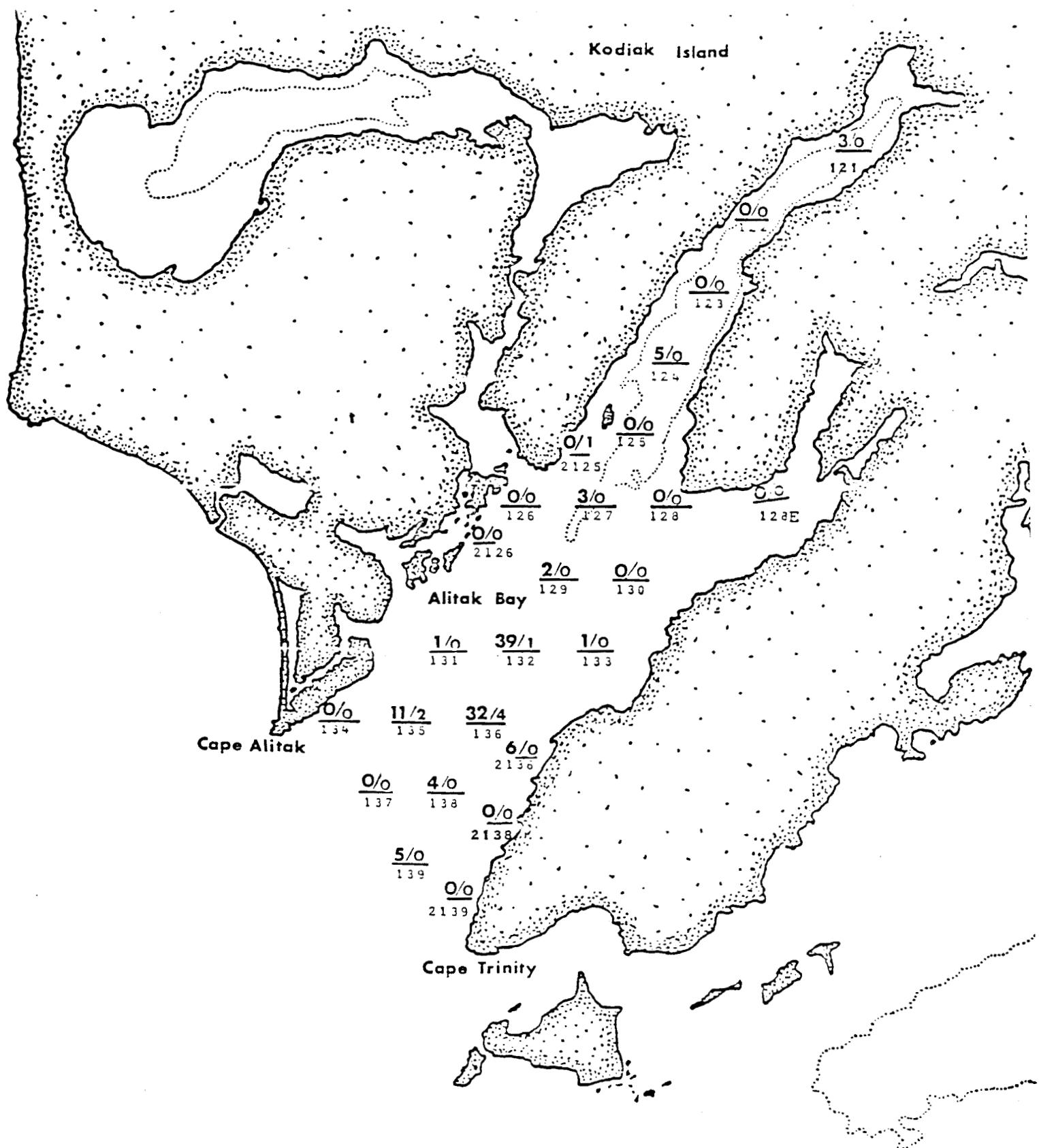


Figure 44k. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1983).

Presented as : 1's + 2's/3's + 4's

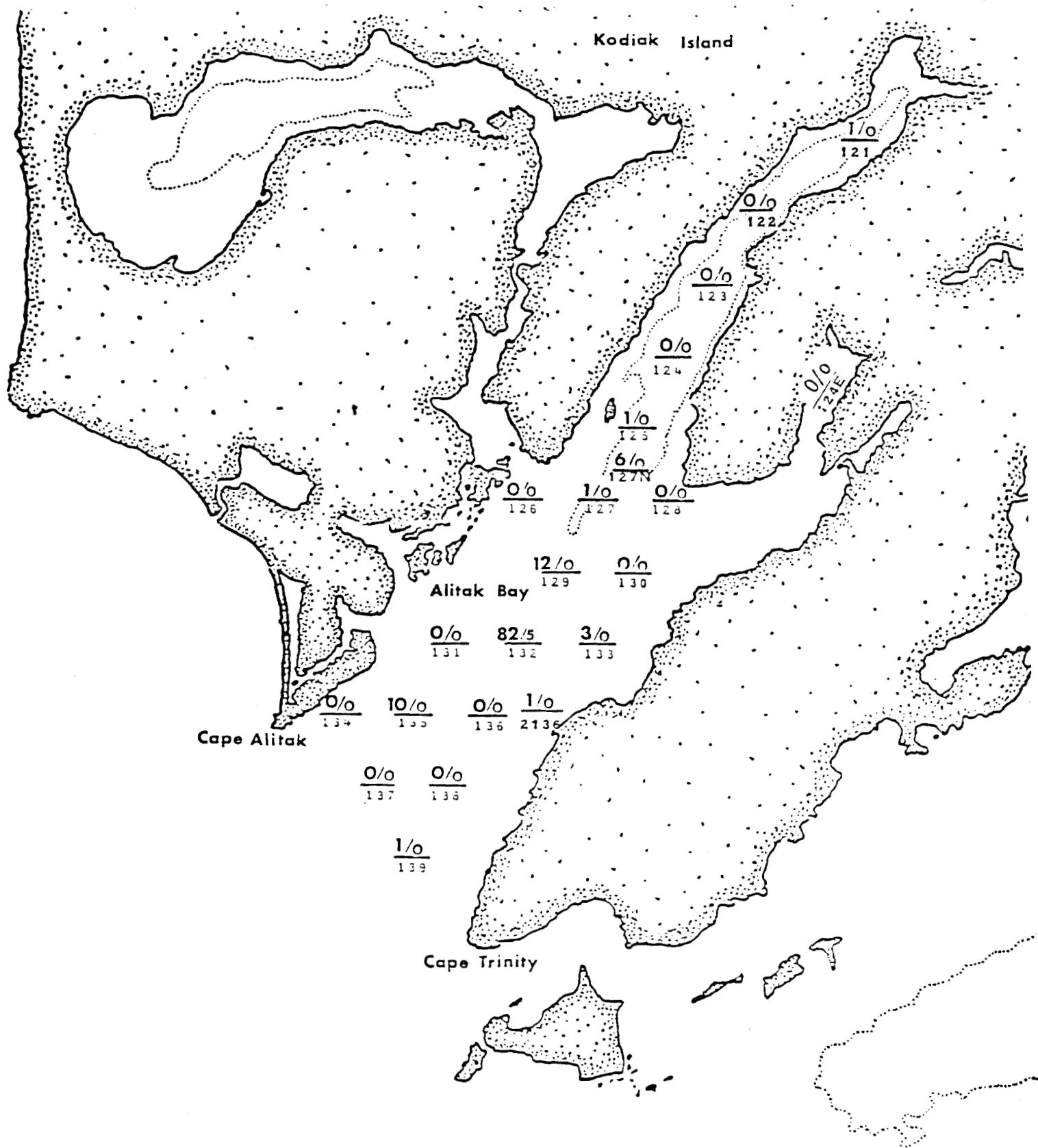


Figure 44L. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1984).

Presented as : 1's + 2's/3's + 4's

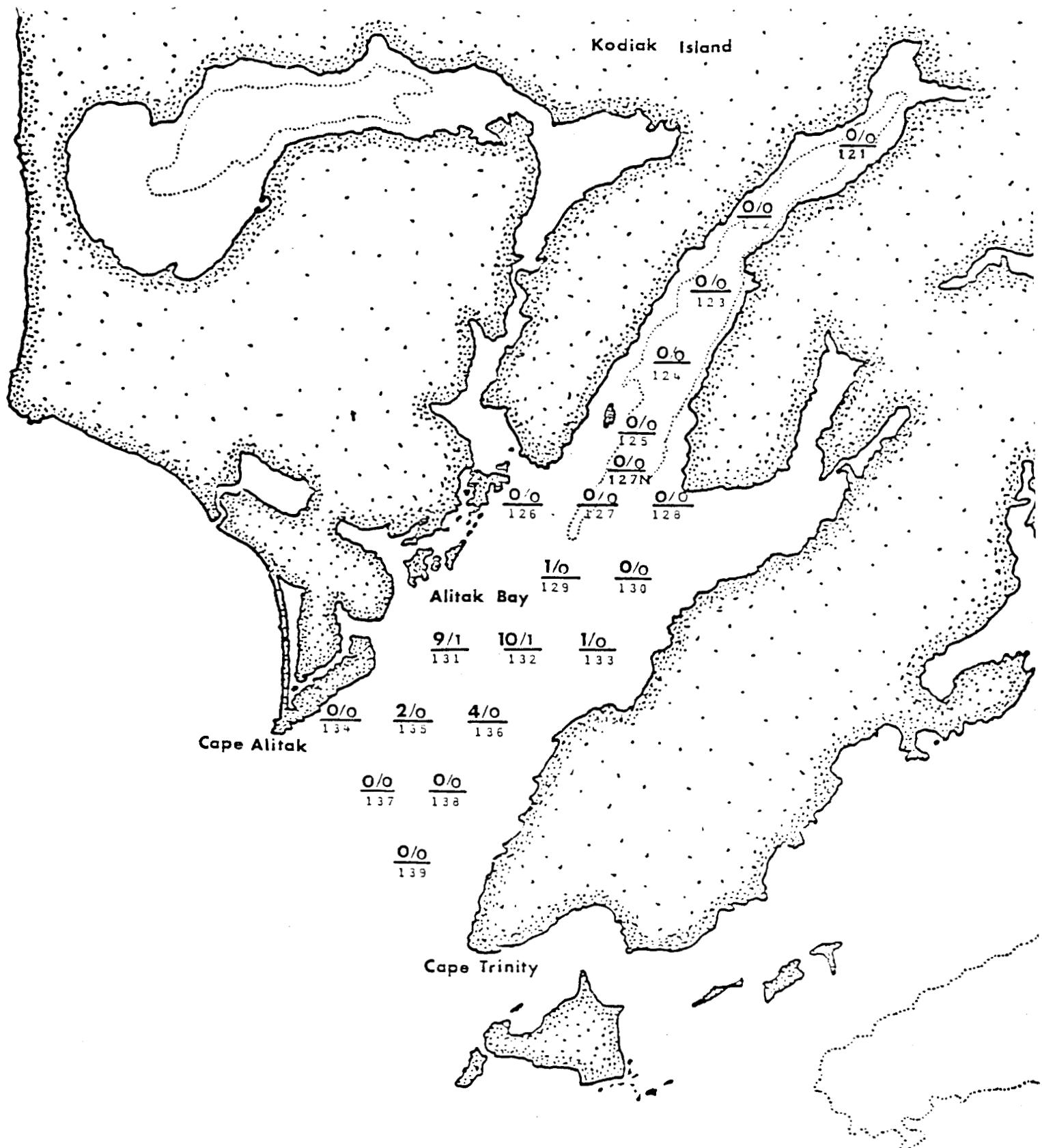


Figure 44m. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1985).

Presented as : 1's + 2's/3's + 4's

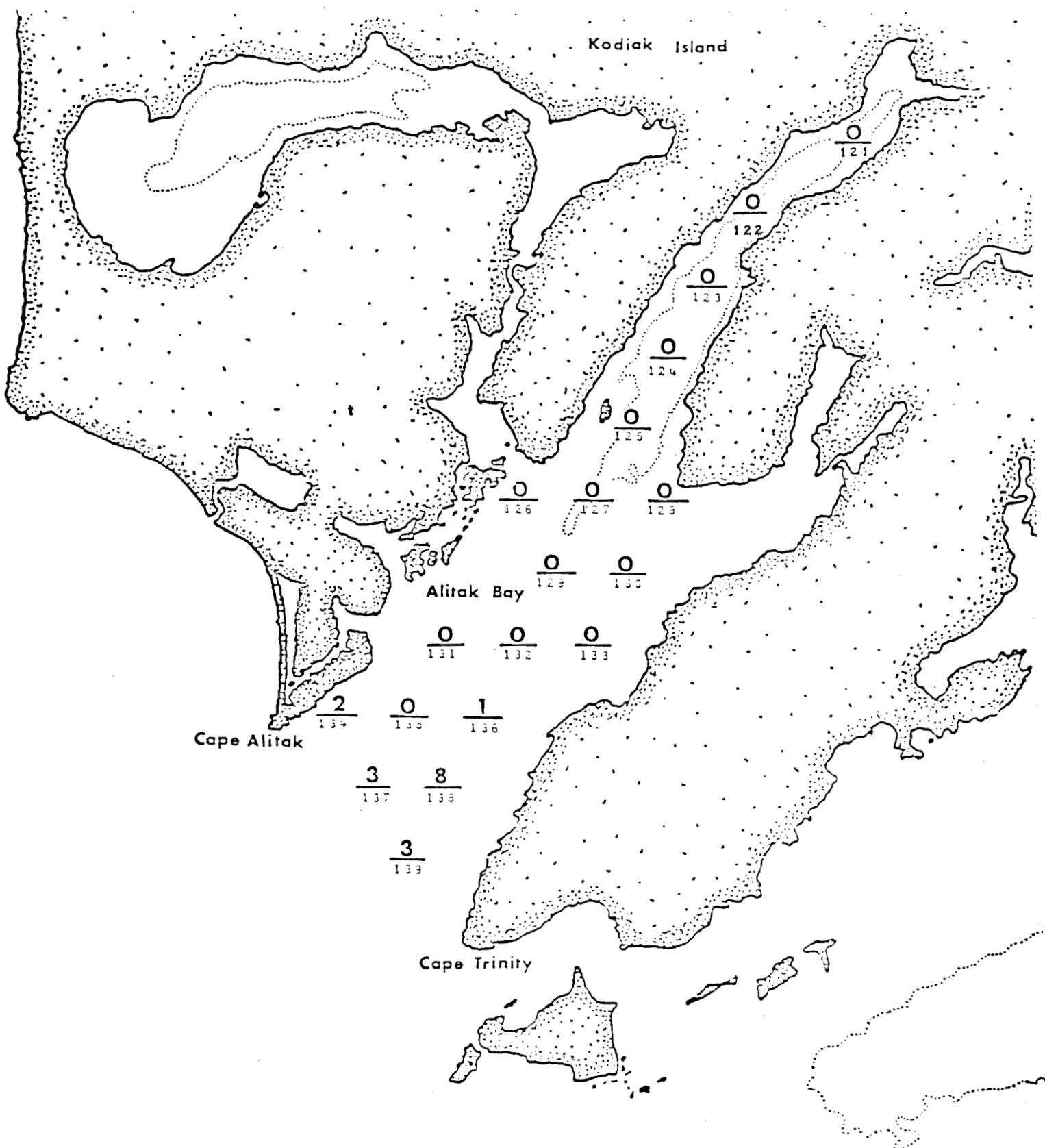


Figure 45a. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1972).

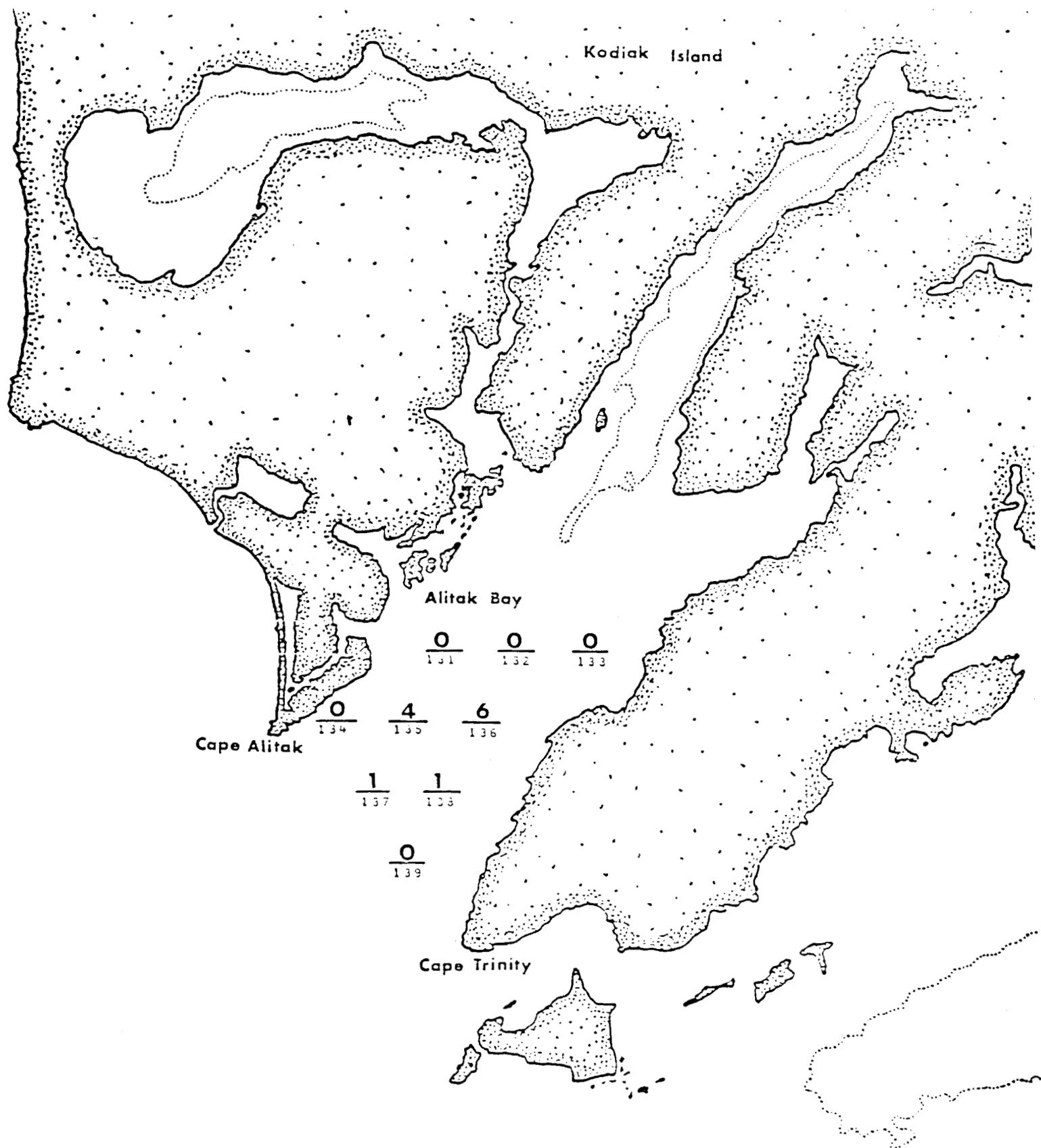


Figure 45b. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1973).

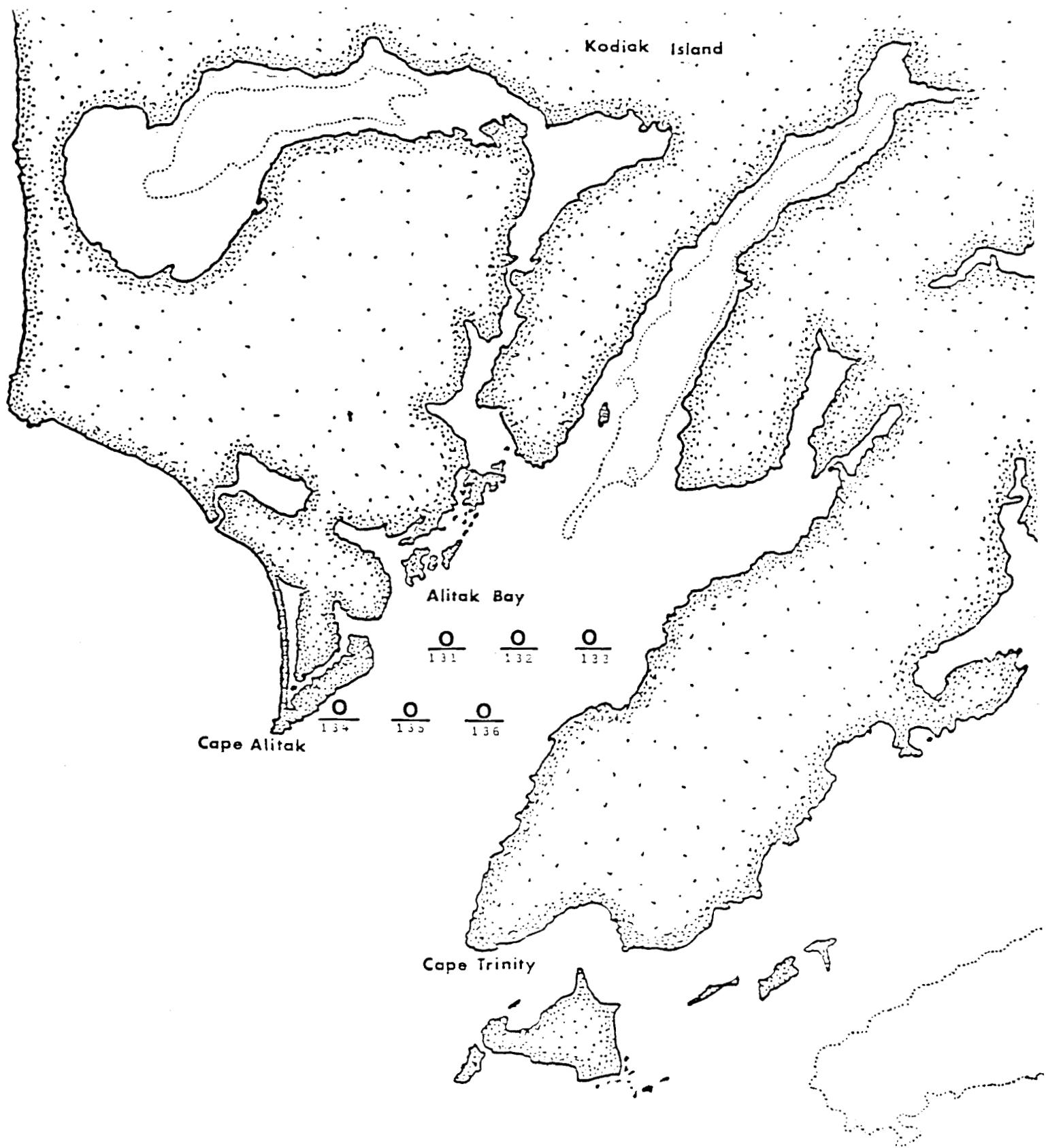


Figure 45c. Average standardized number of juvenile female king crab,  
Paralithodes camtschatica, captured per pot at bay research  
stations at Alitak Bay, Kodiak Island (1974).

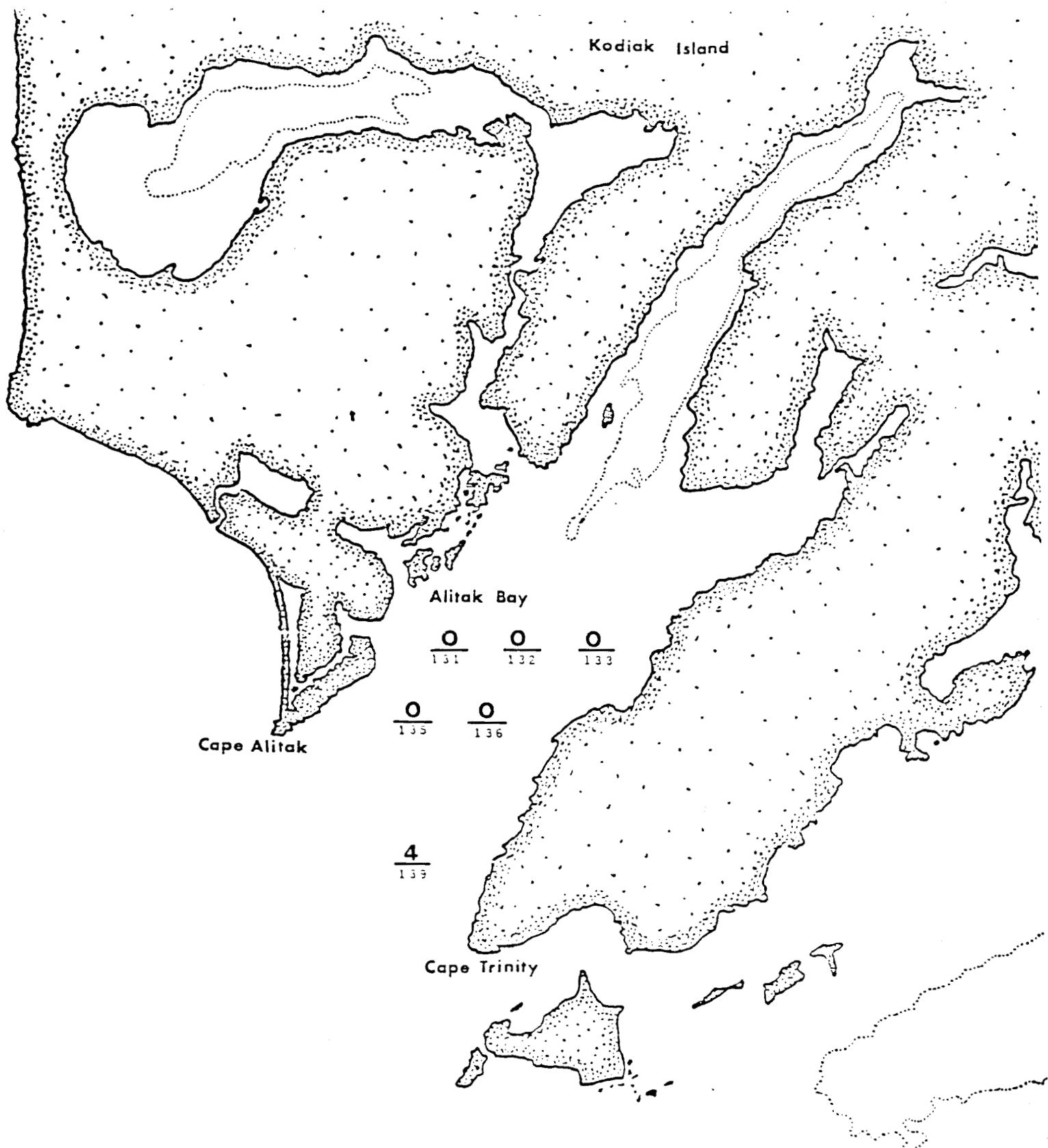


Figure 45d. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1975).

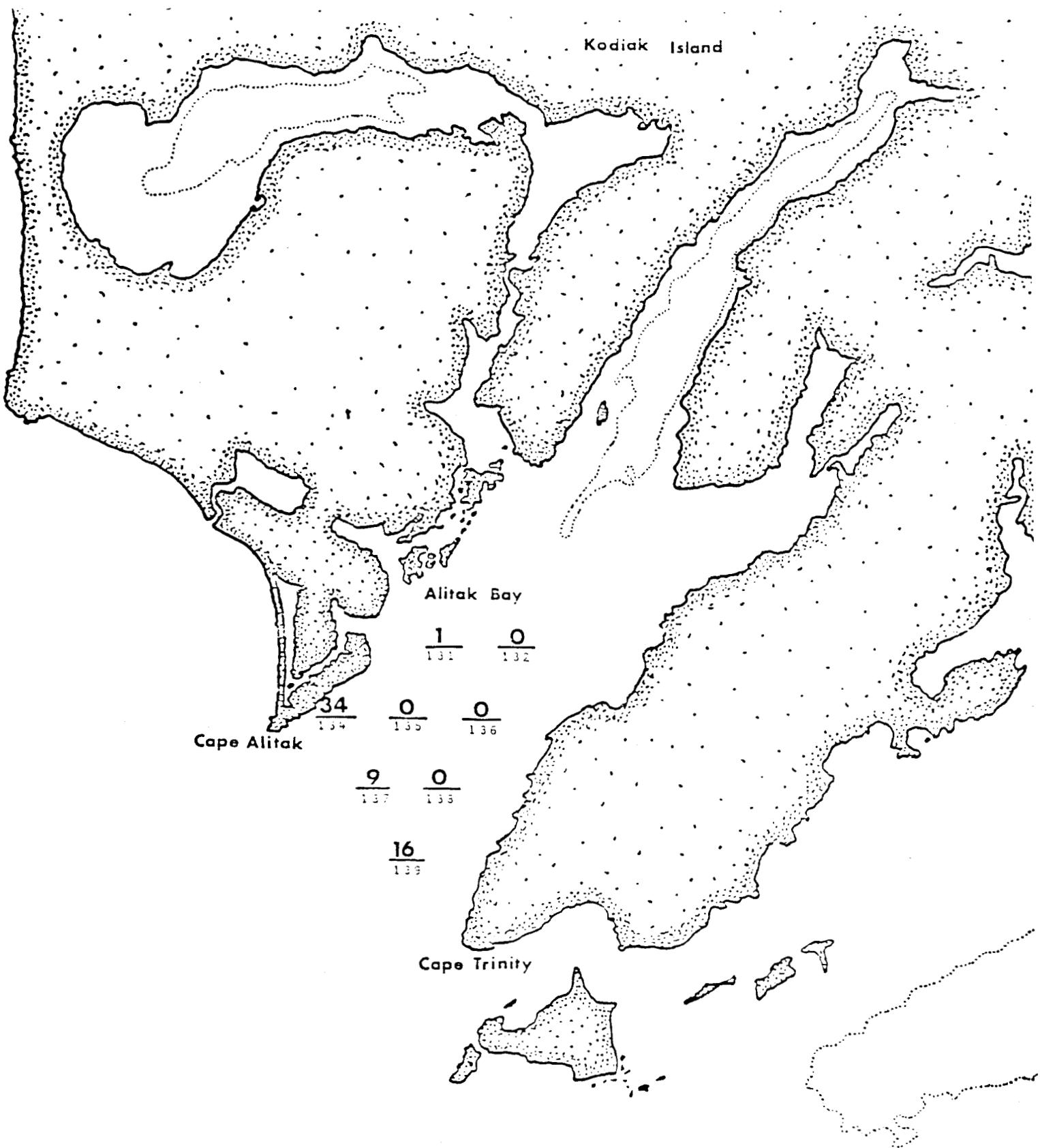


Figure 45e. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1976).

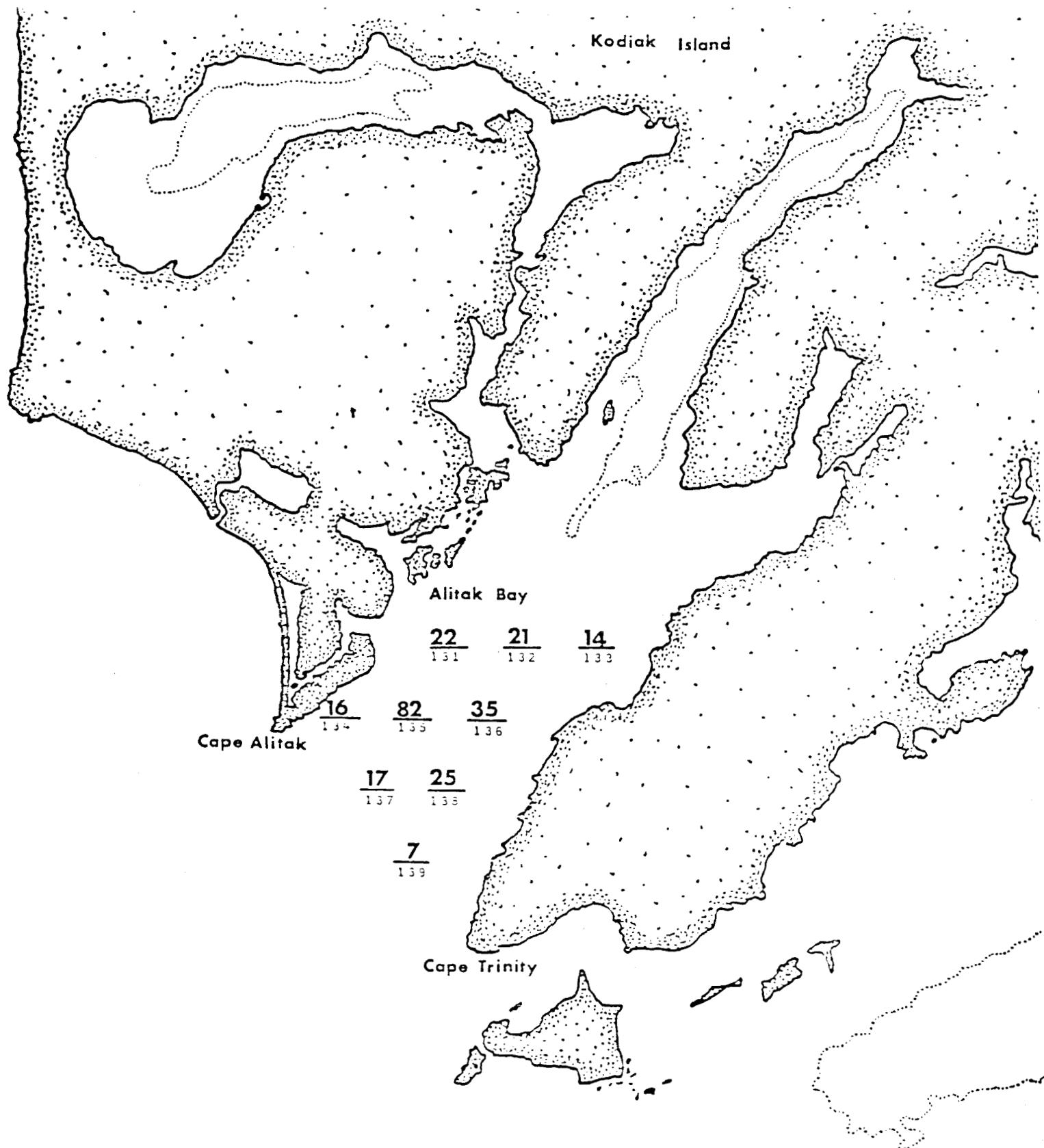


Figure 45f. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1977).

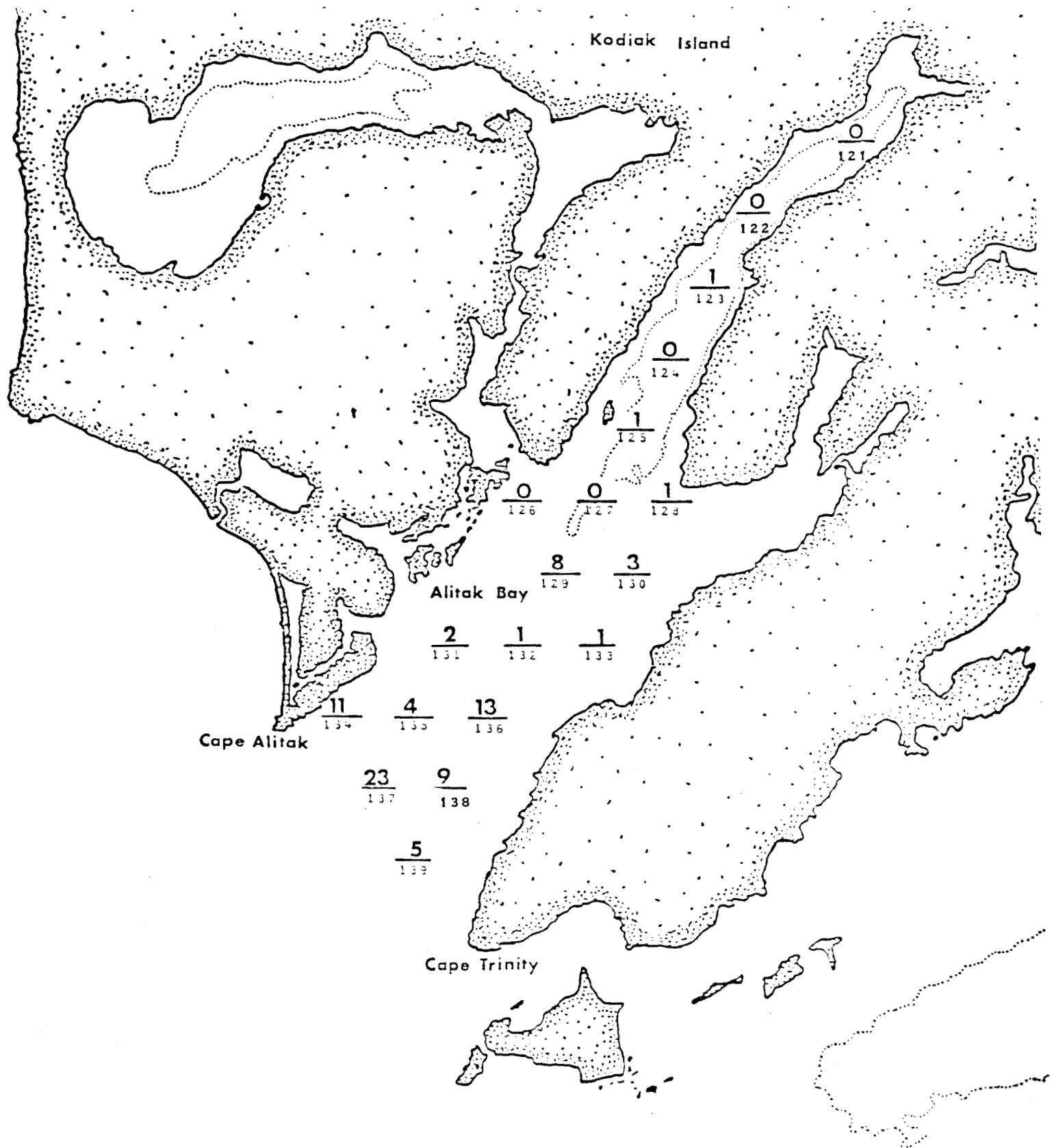


Figure 45g. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1979).

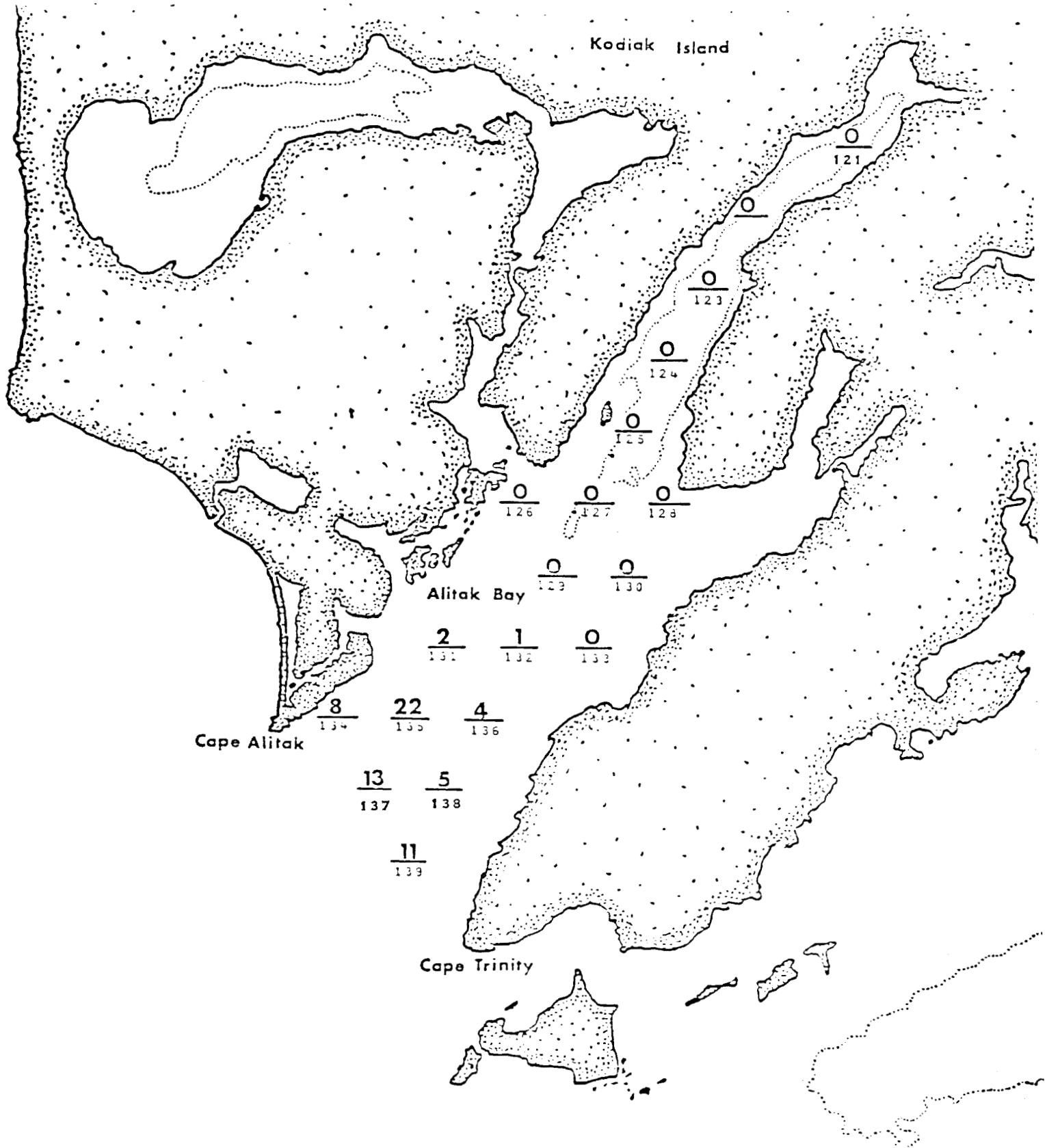


Figure 45h. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1980).

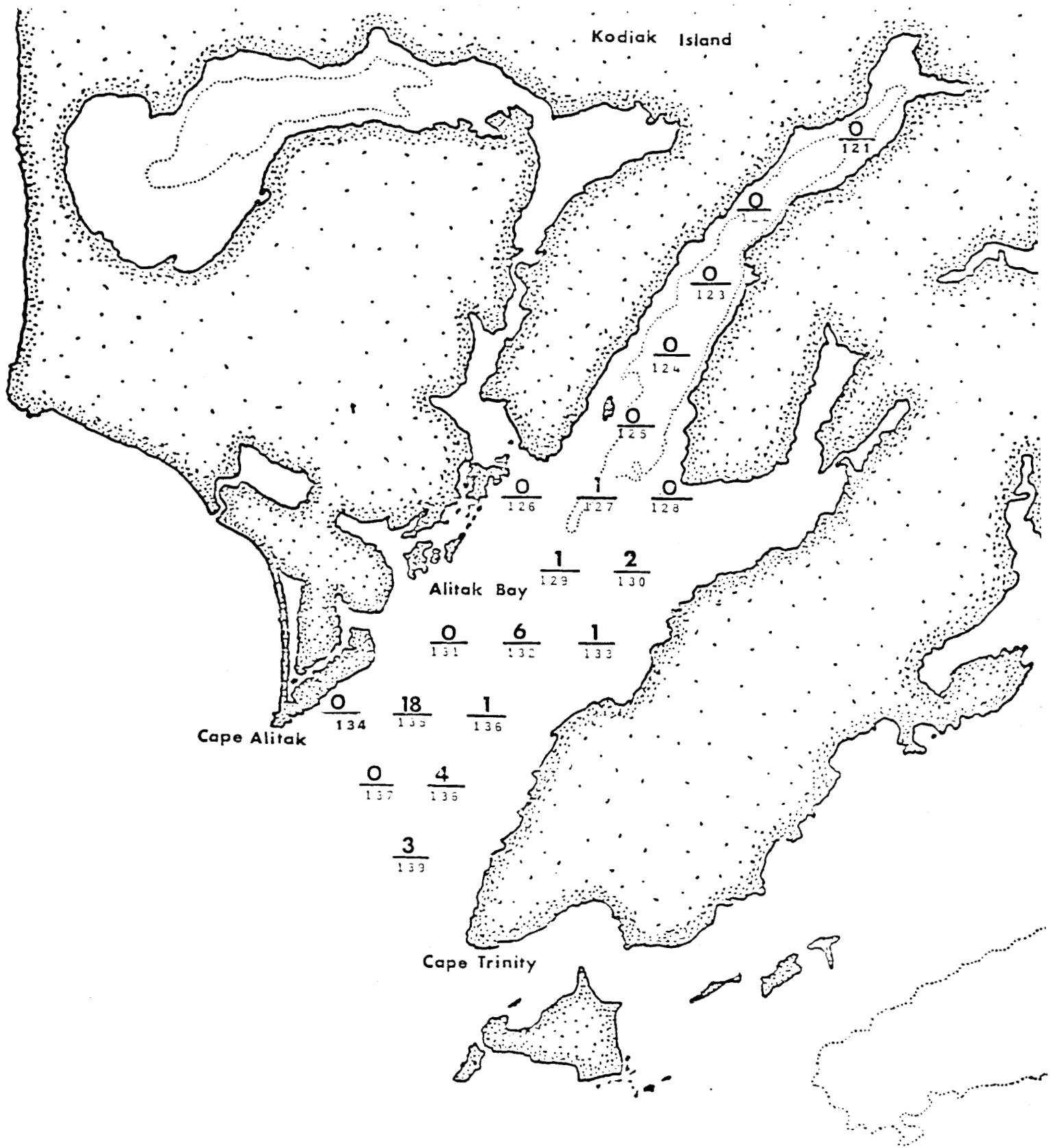


Figure 45i. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1981).

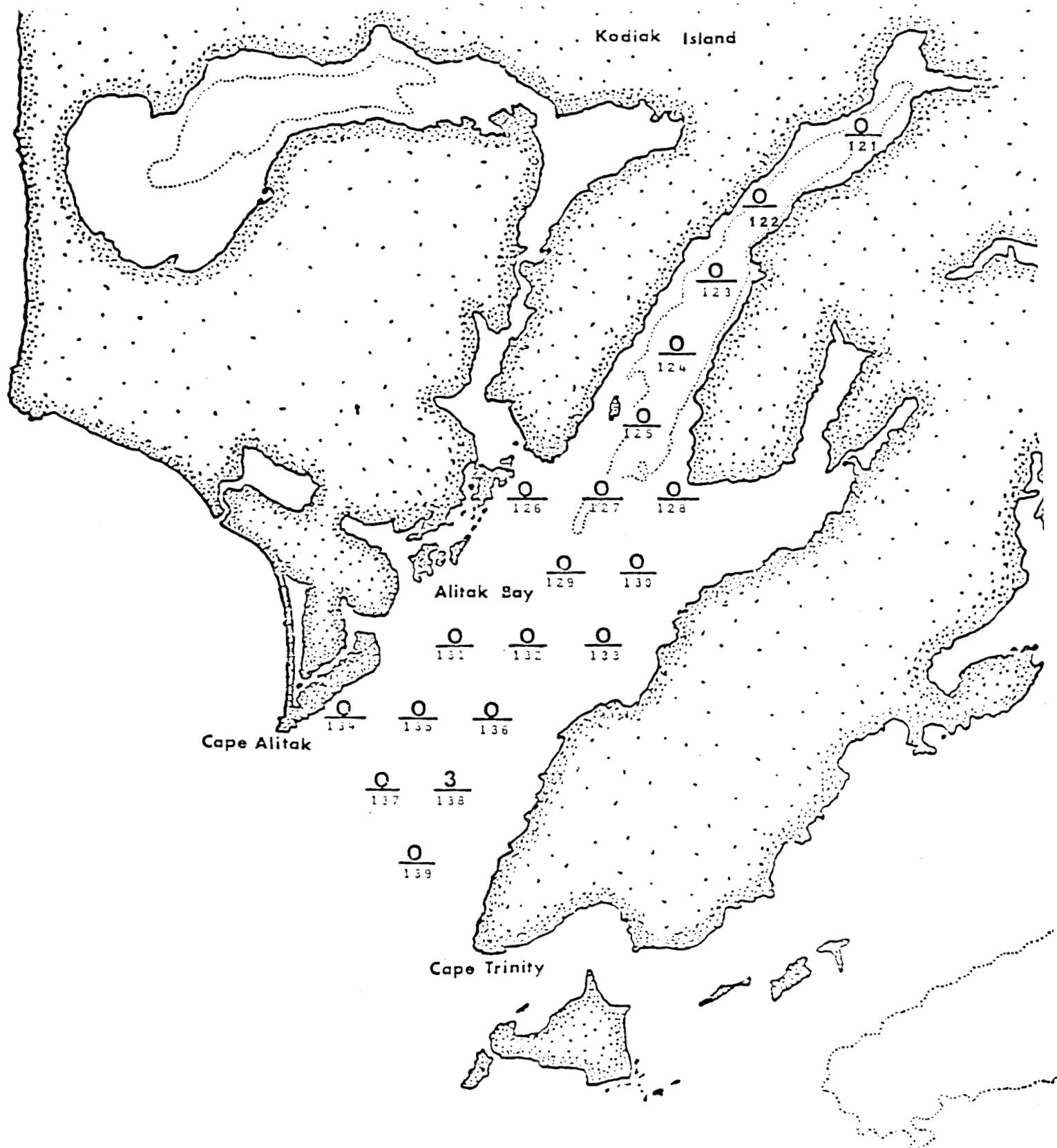


Figure 45j. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1982).

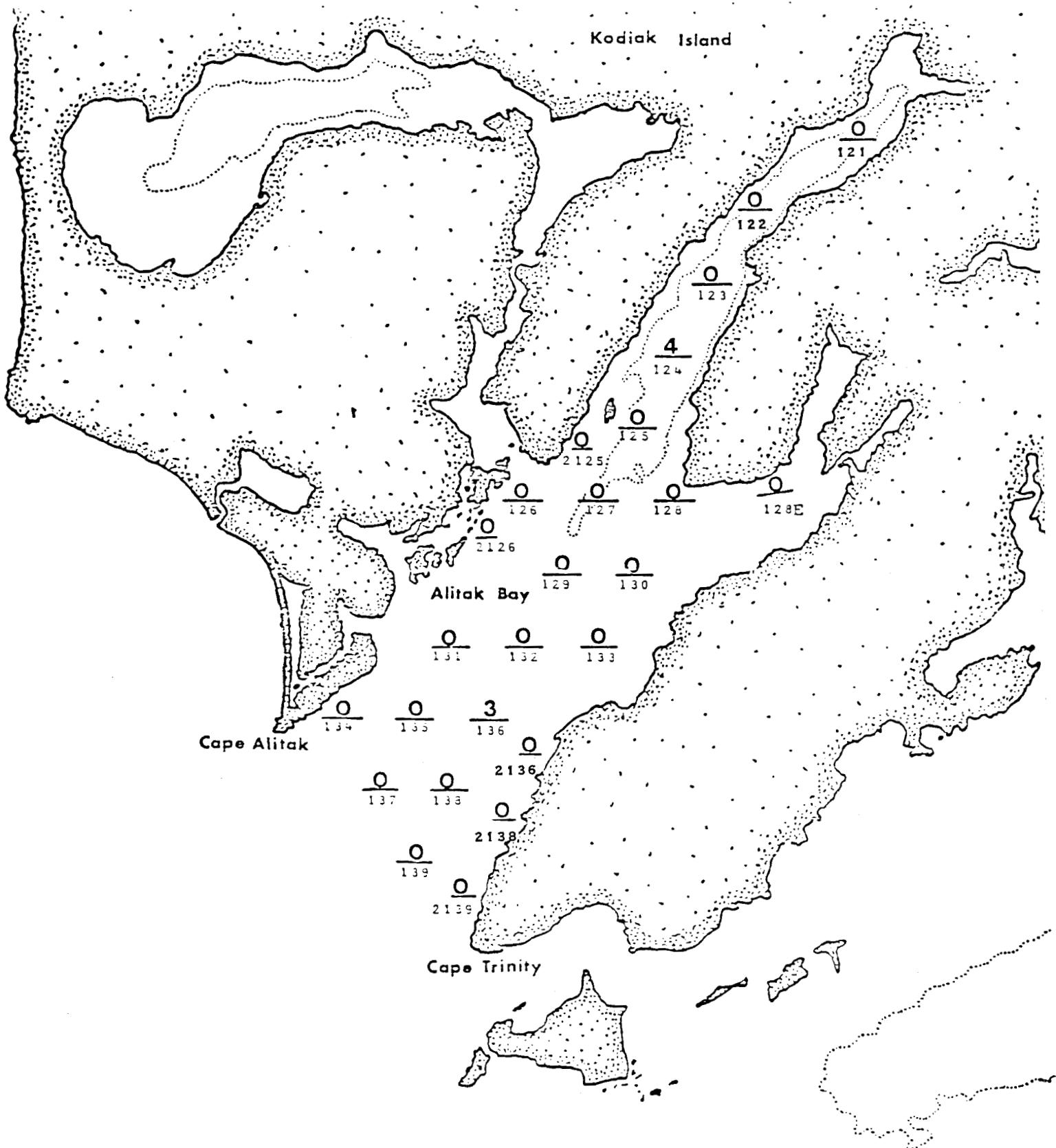


Figure 45k. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1983).

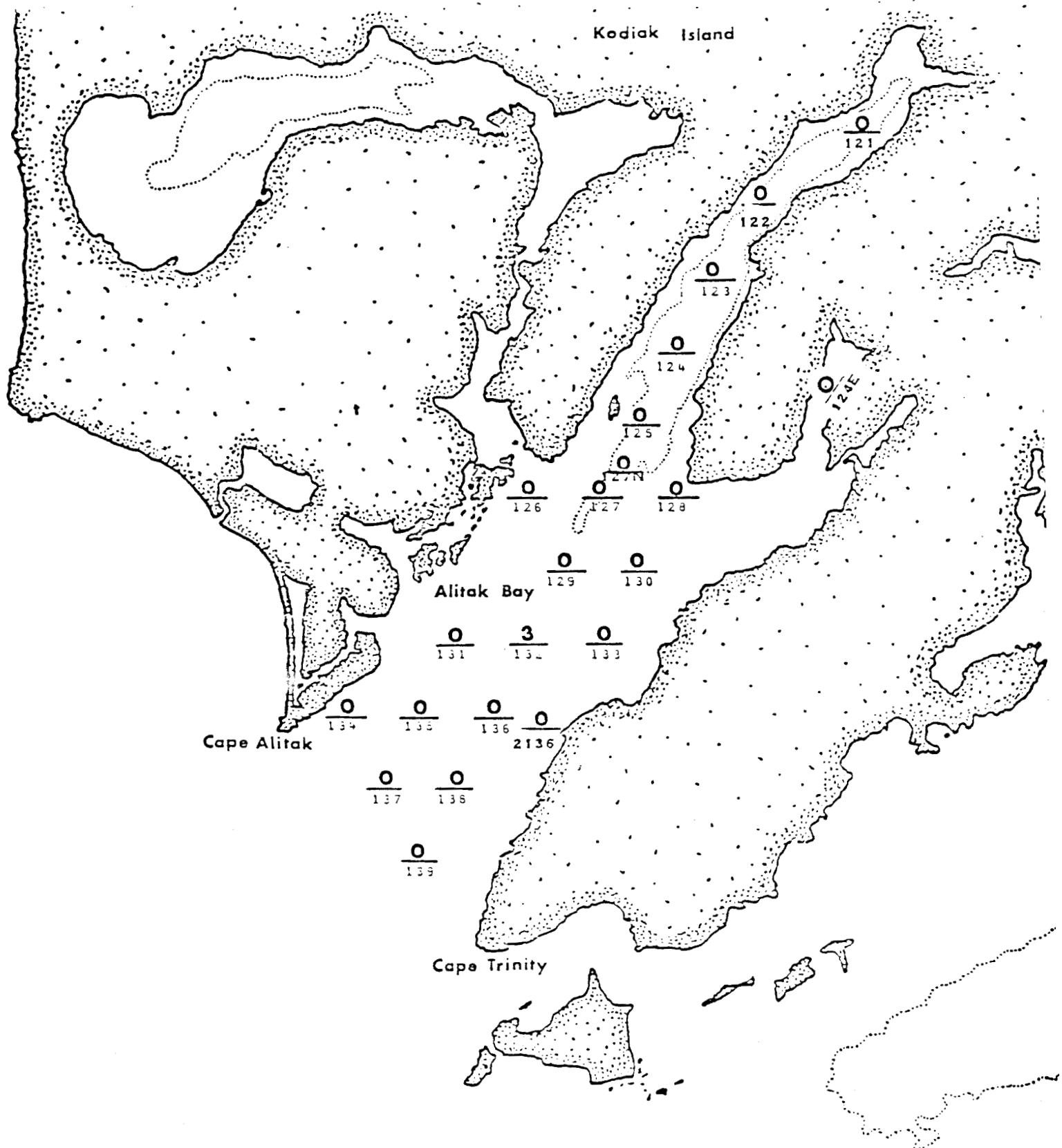


Figure 45L. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1984).

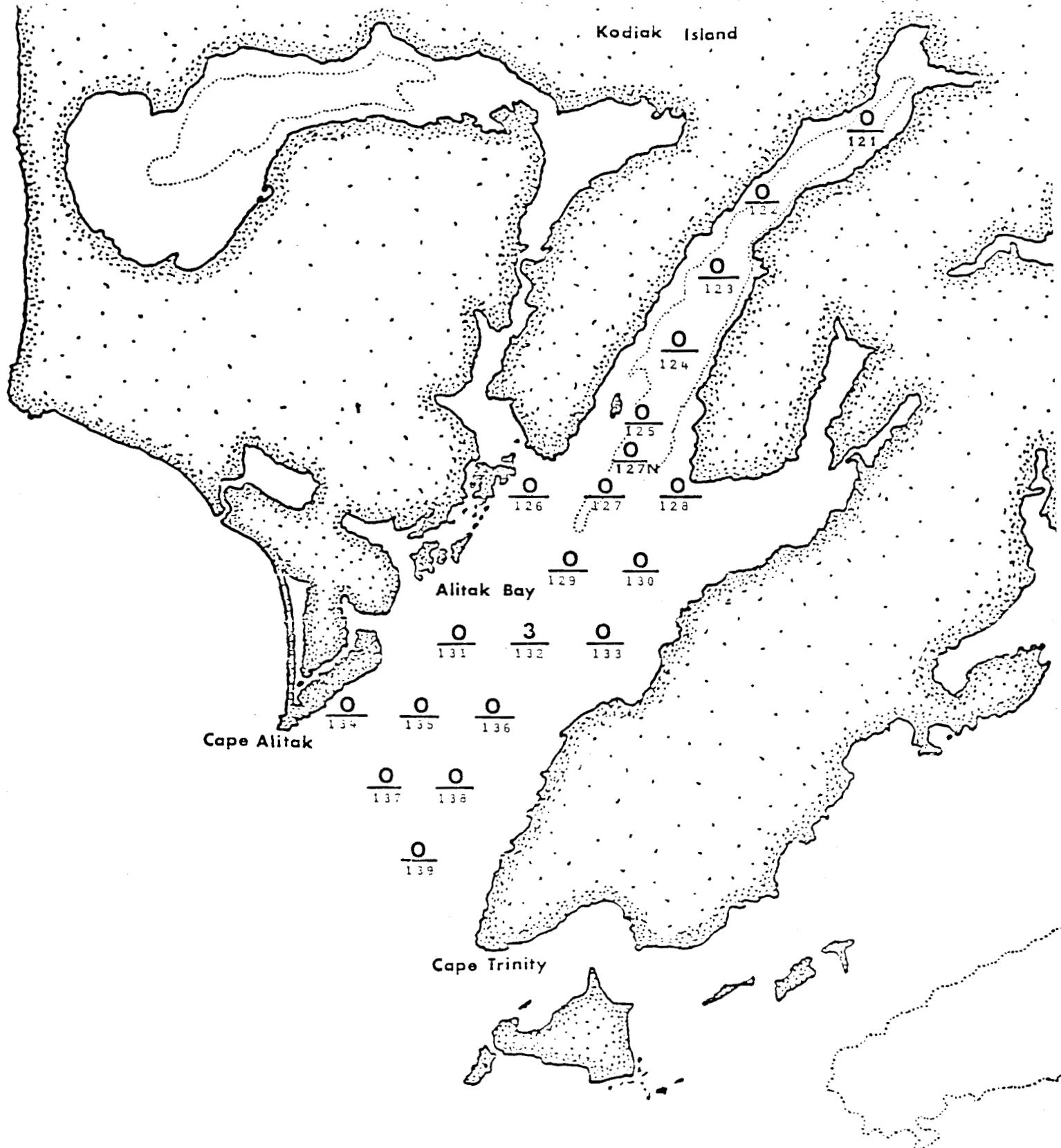


Figure 45m. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Alitak Bay, Kodiak Island (1985).

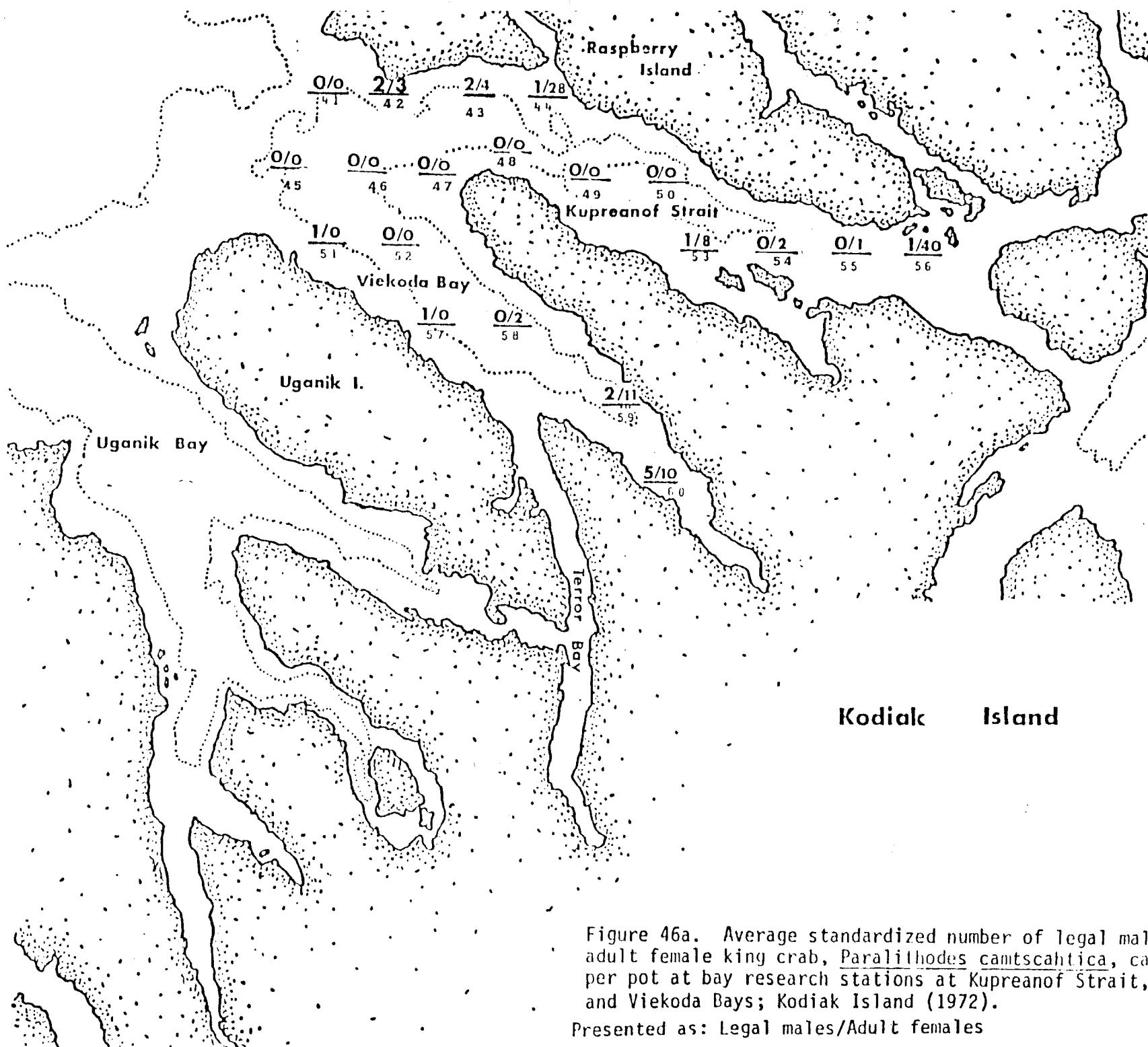
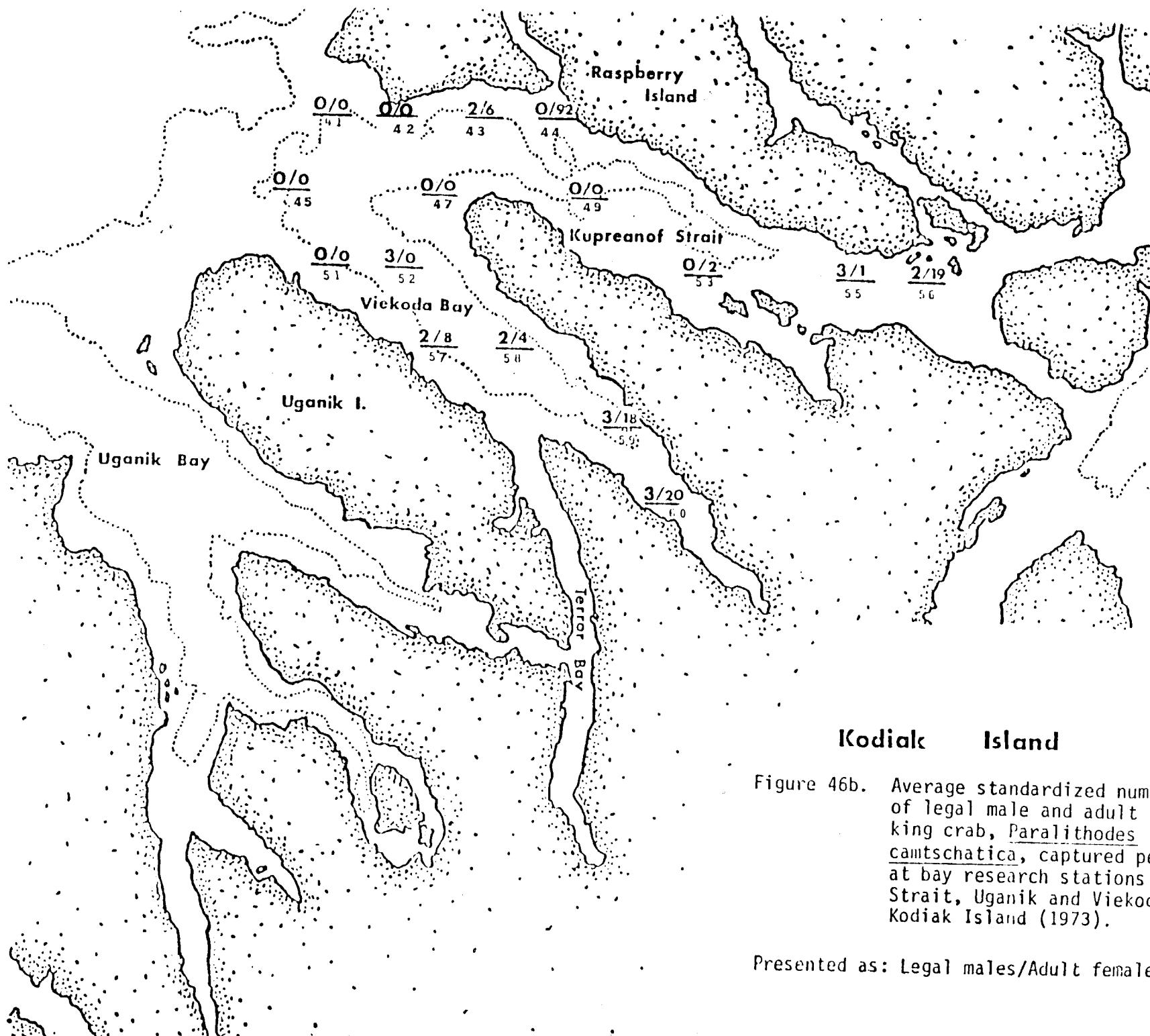


Figure 46a. Average standardized number of legal male and adult female king crab, *Paralithodes camtschaatica*, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1972).  
Presented as: Legal males/Adult females



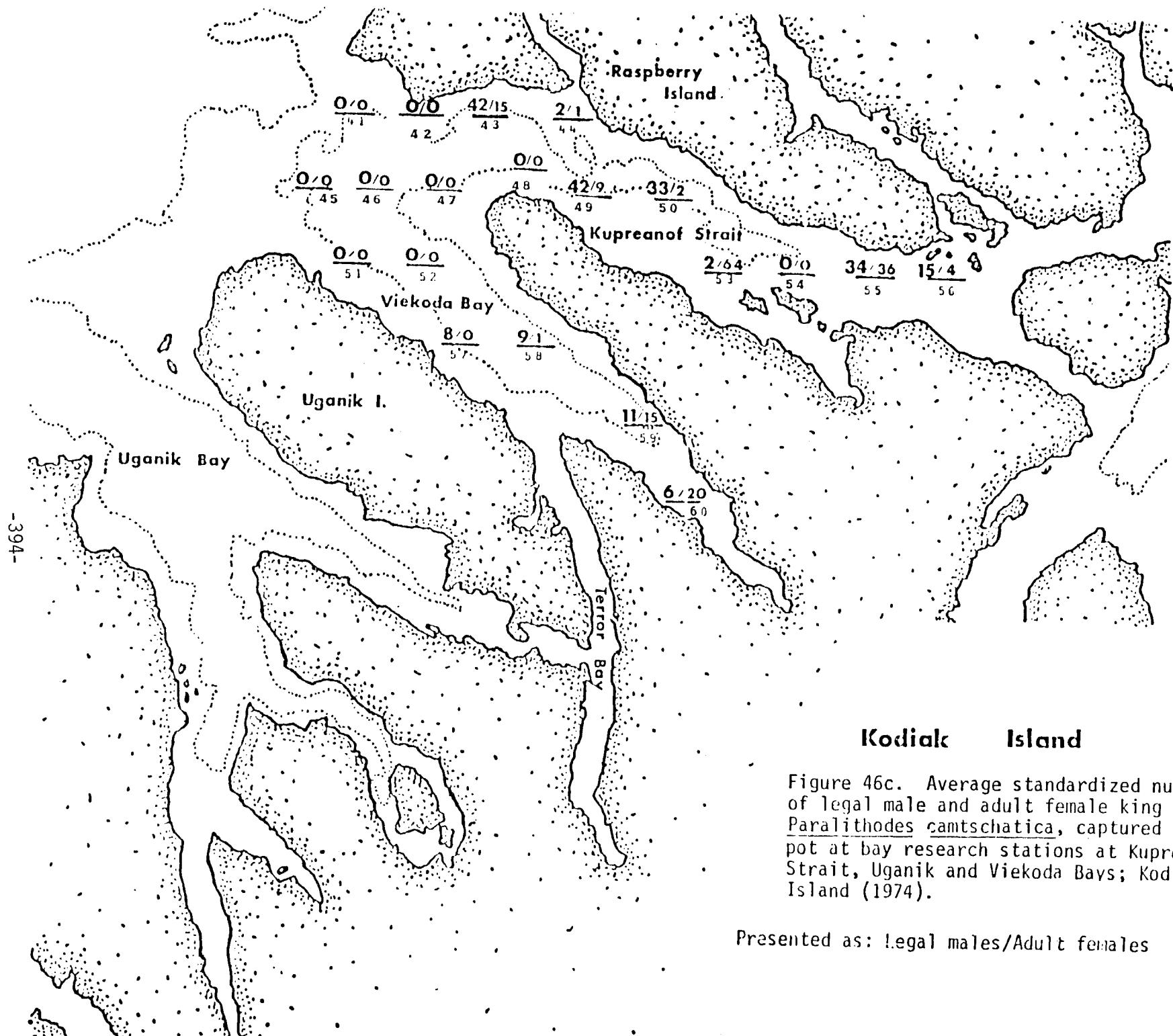


Figure 46c. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1974).

Presented as: Legal males/Adult females

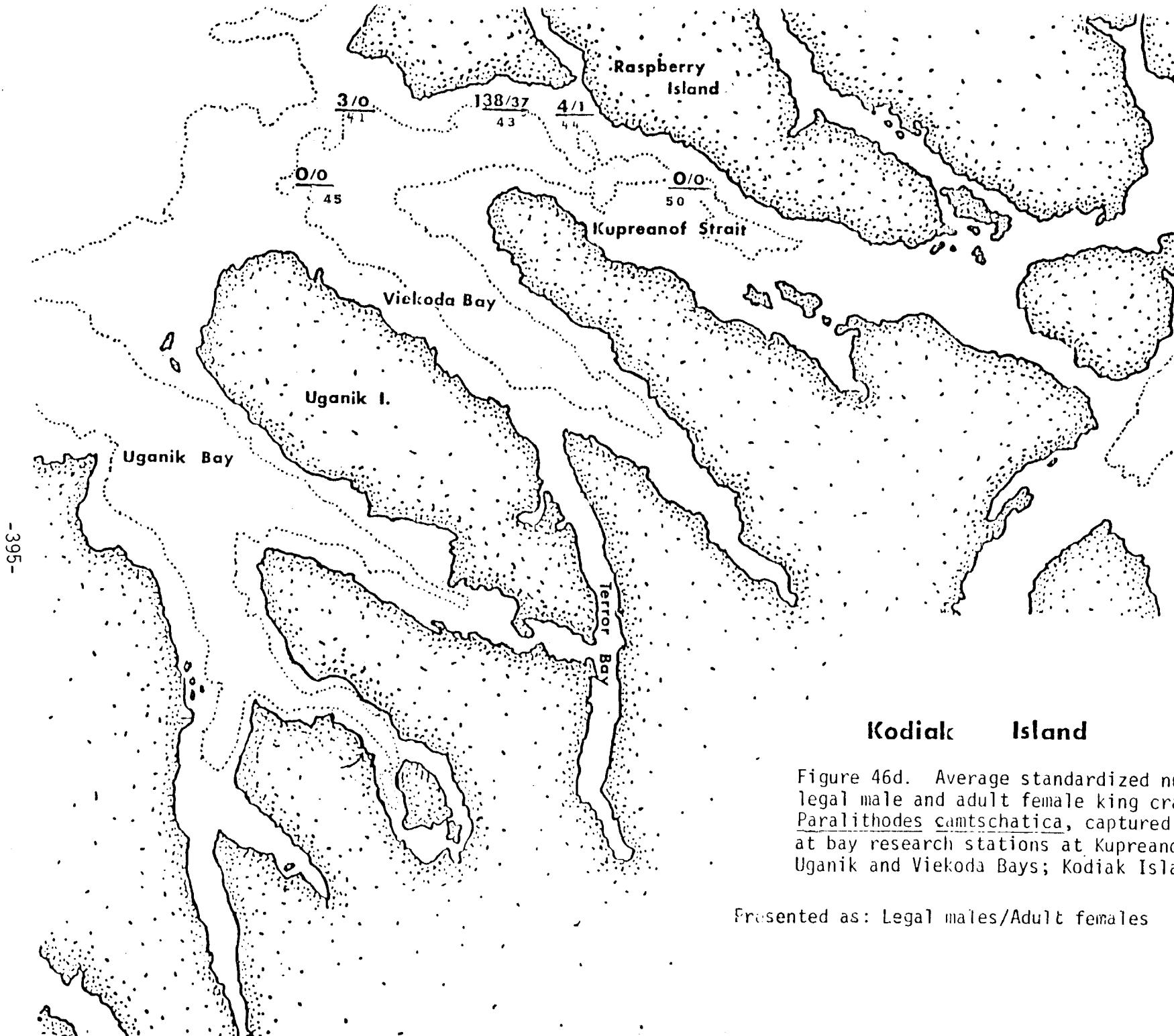
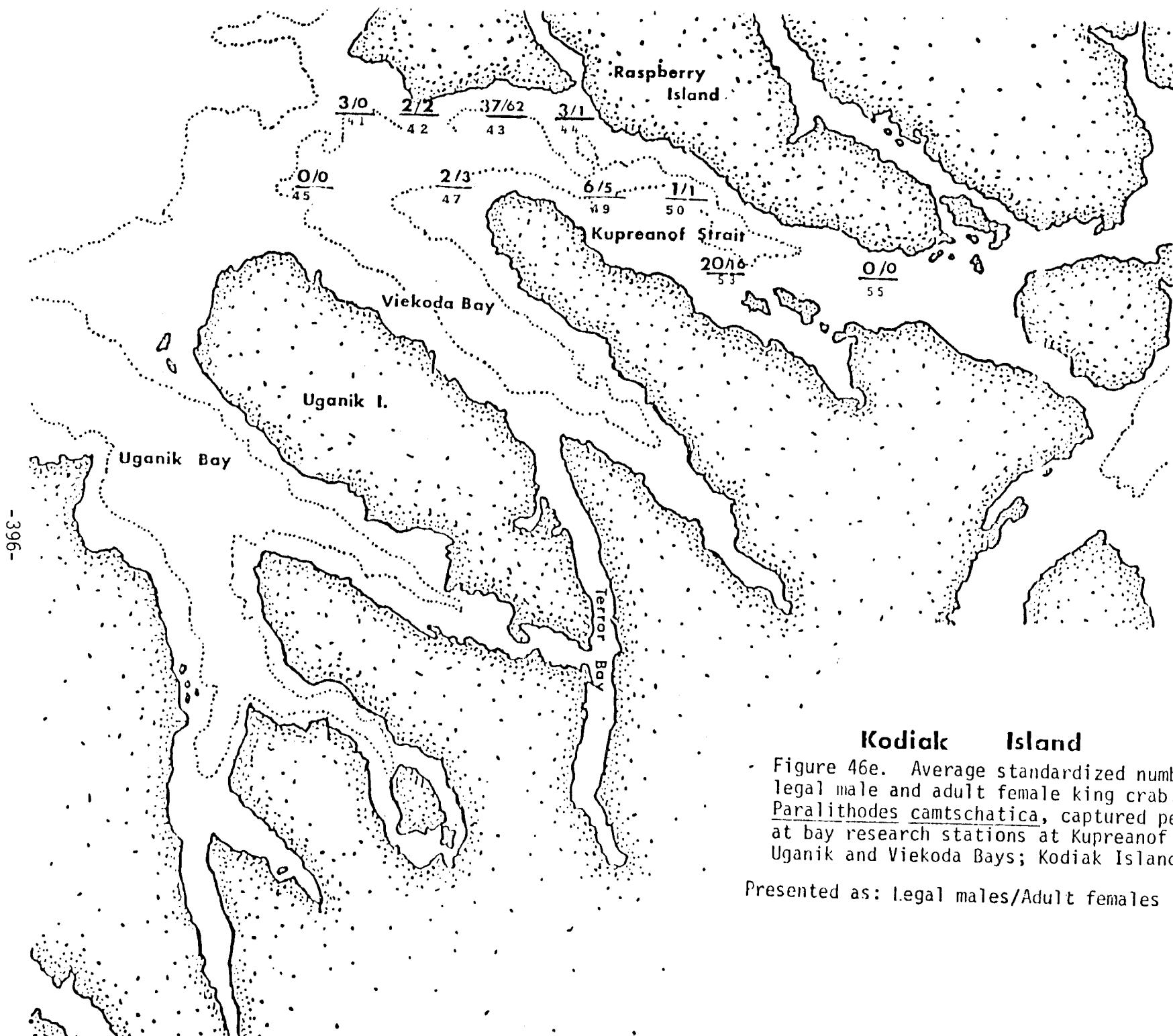


Figure 46d. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1975).

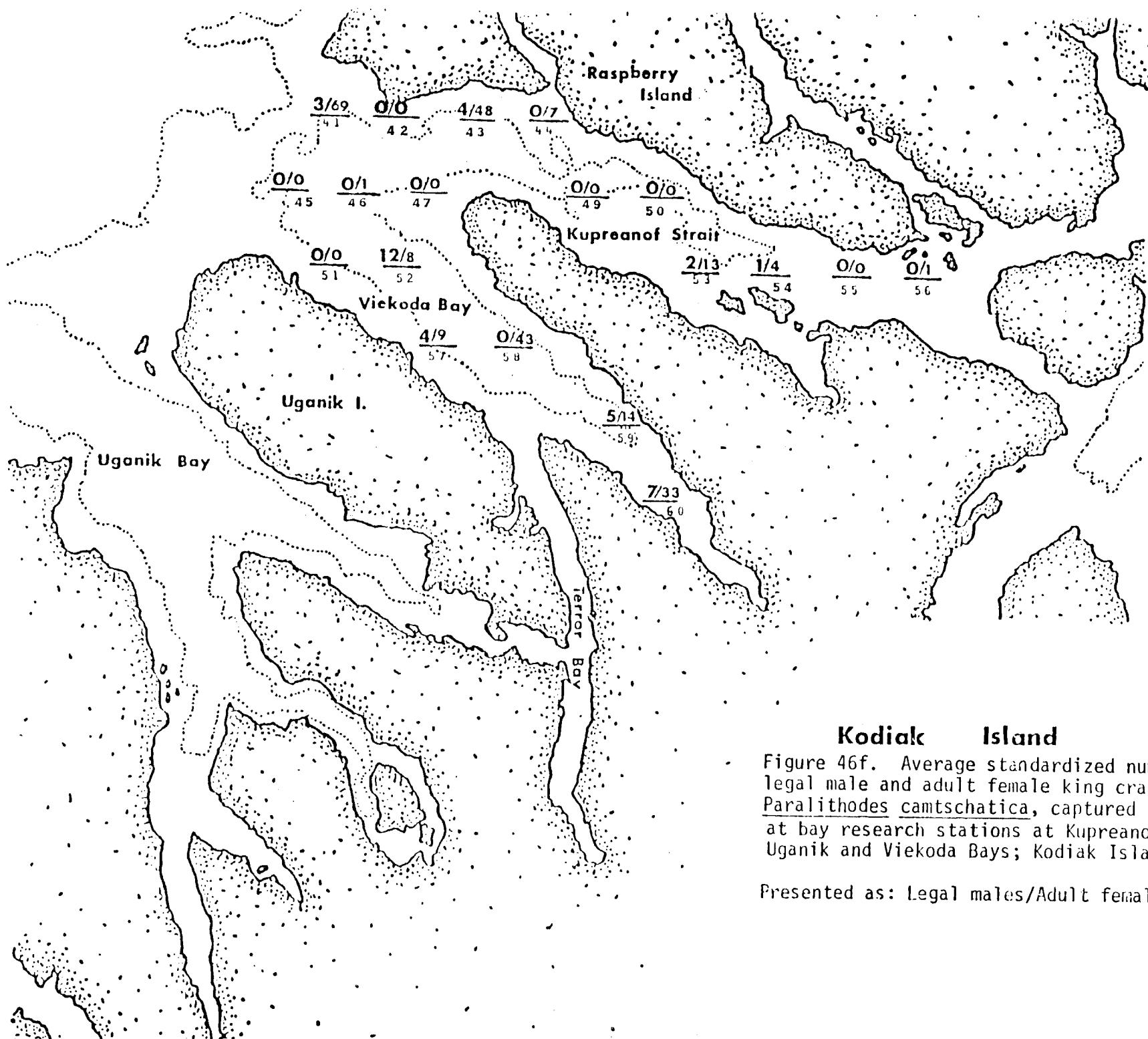
Presented as: Legal males/Adult females



### Kodiak Island

Figure 46e. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1976).

Presented as: legal males/Adult females



### Kodiak Island

Figure 46f. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1977).

Presented as: Legal males/Adult females

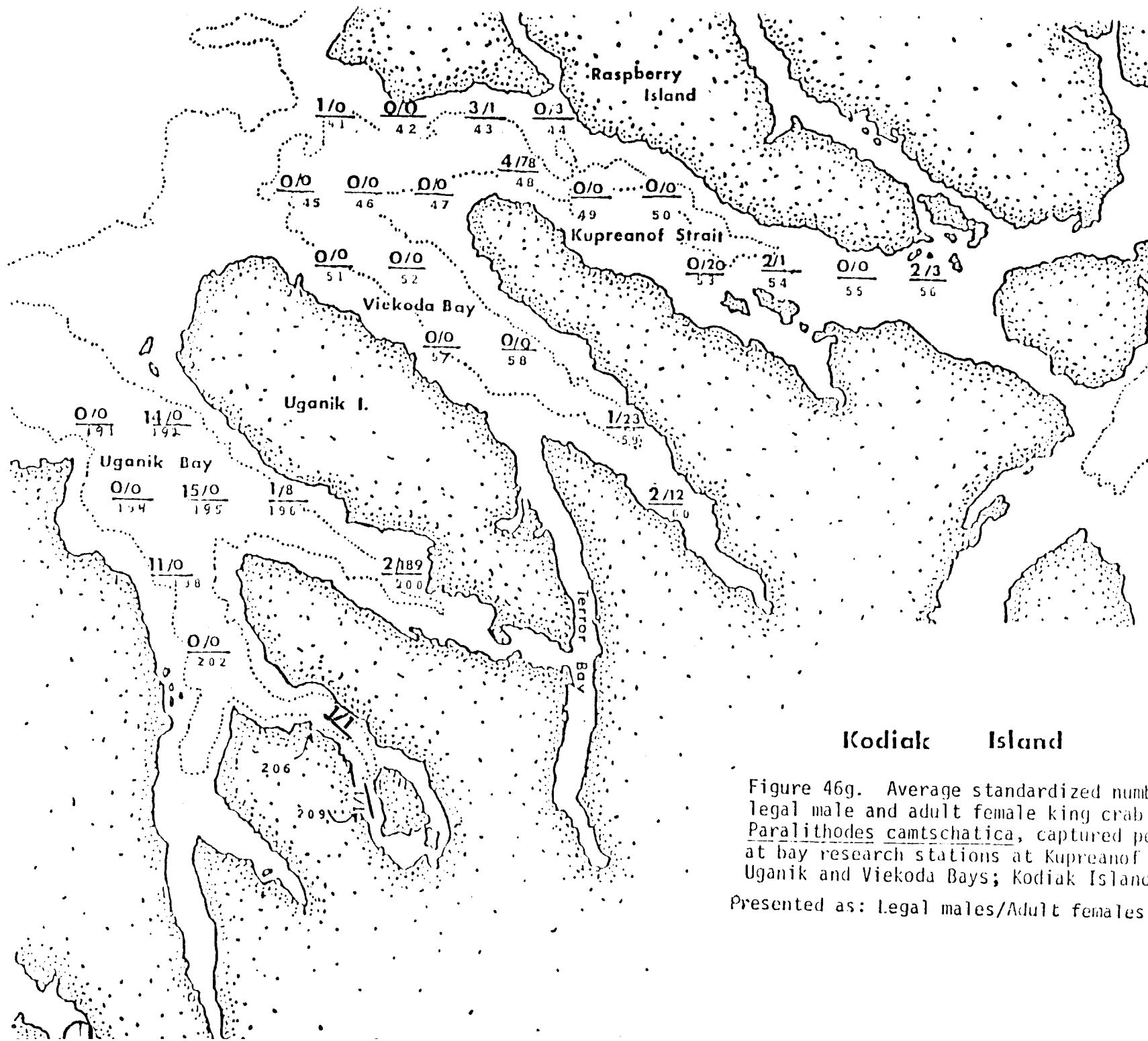
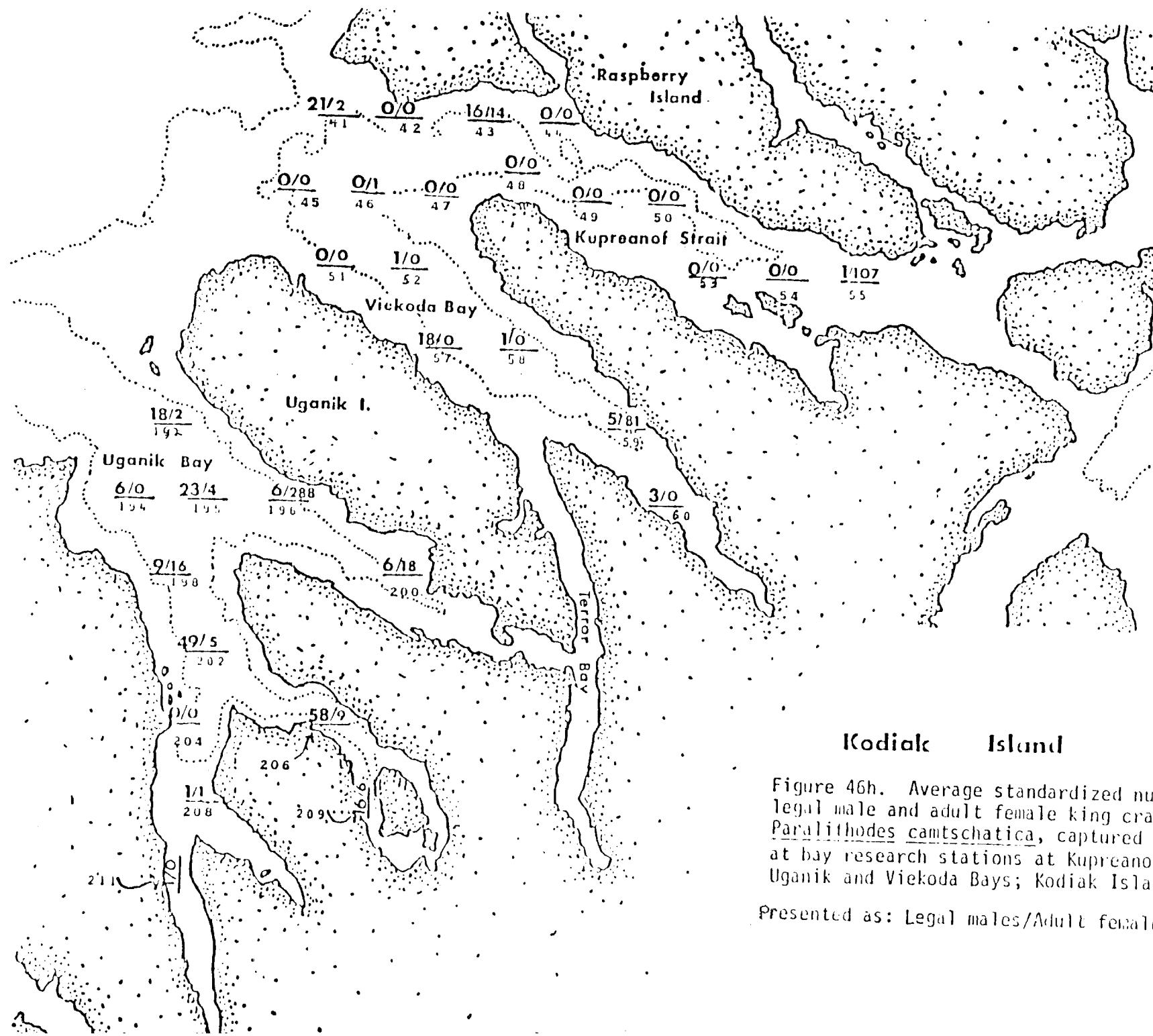


Figure 46g. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1979).

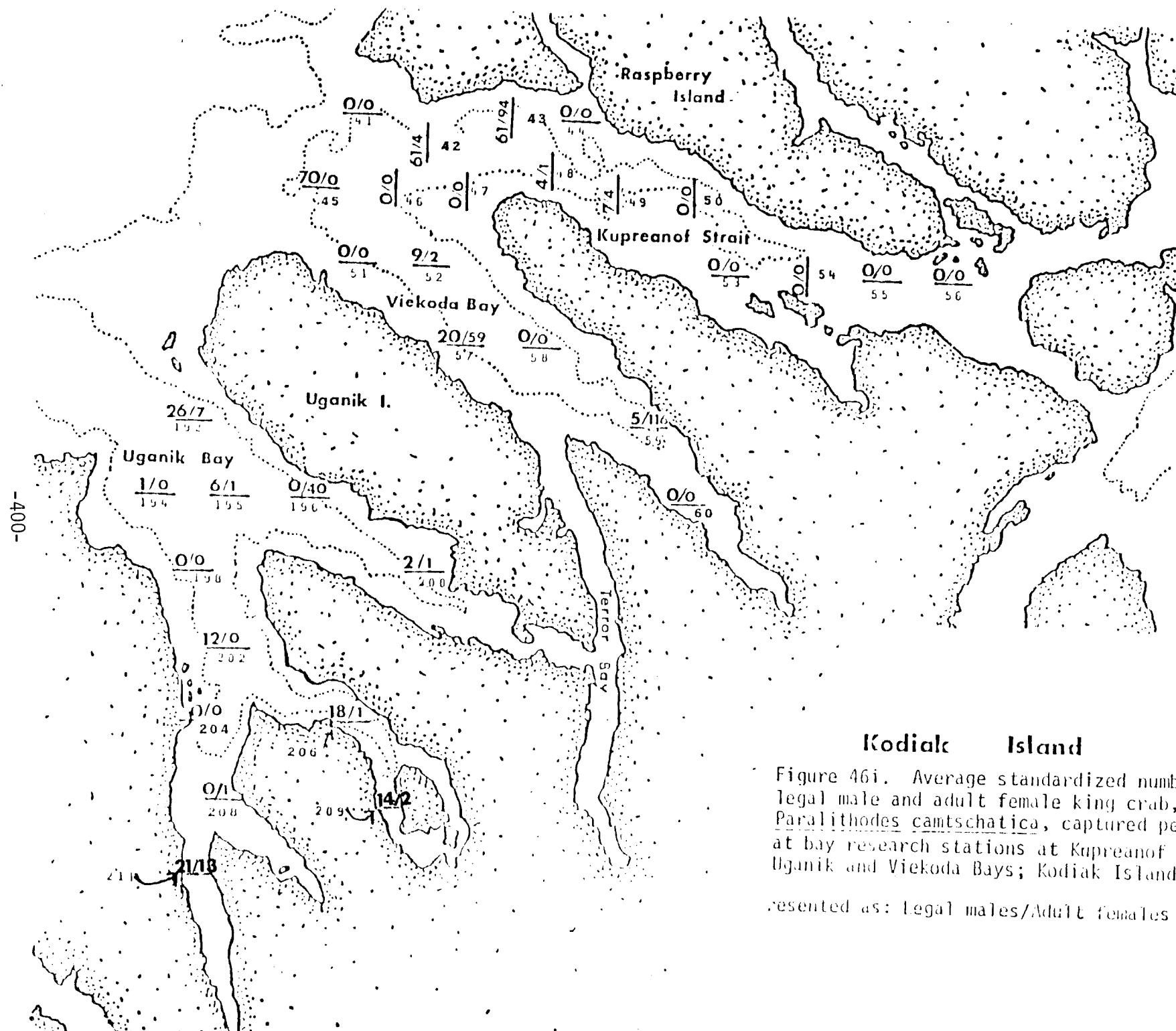
Presented as: Legal males/Adult females



### Kodiak Island

Figure 46h. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1980).

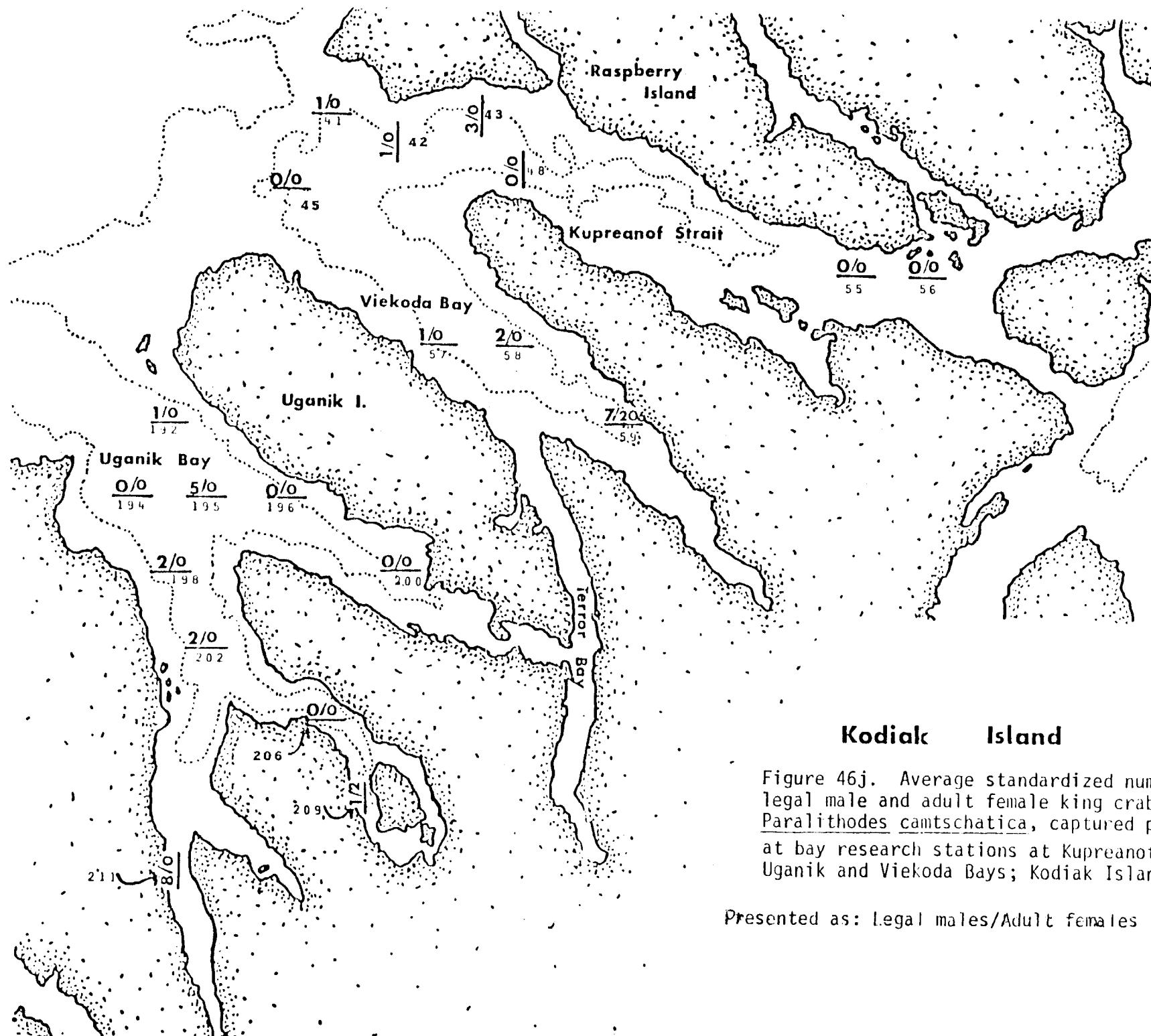
Presented as: Legal males/Adult females



### Kodiak Island

Figure 46i. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1981).

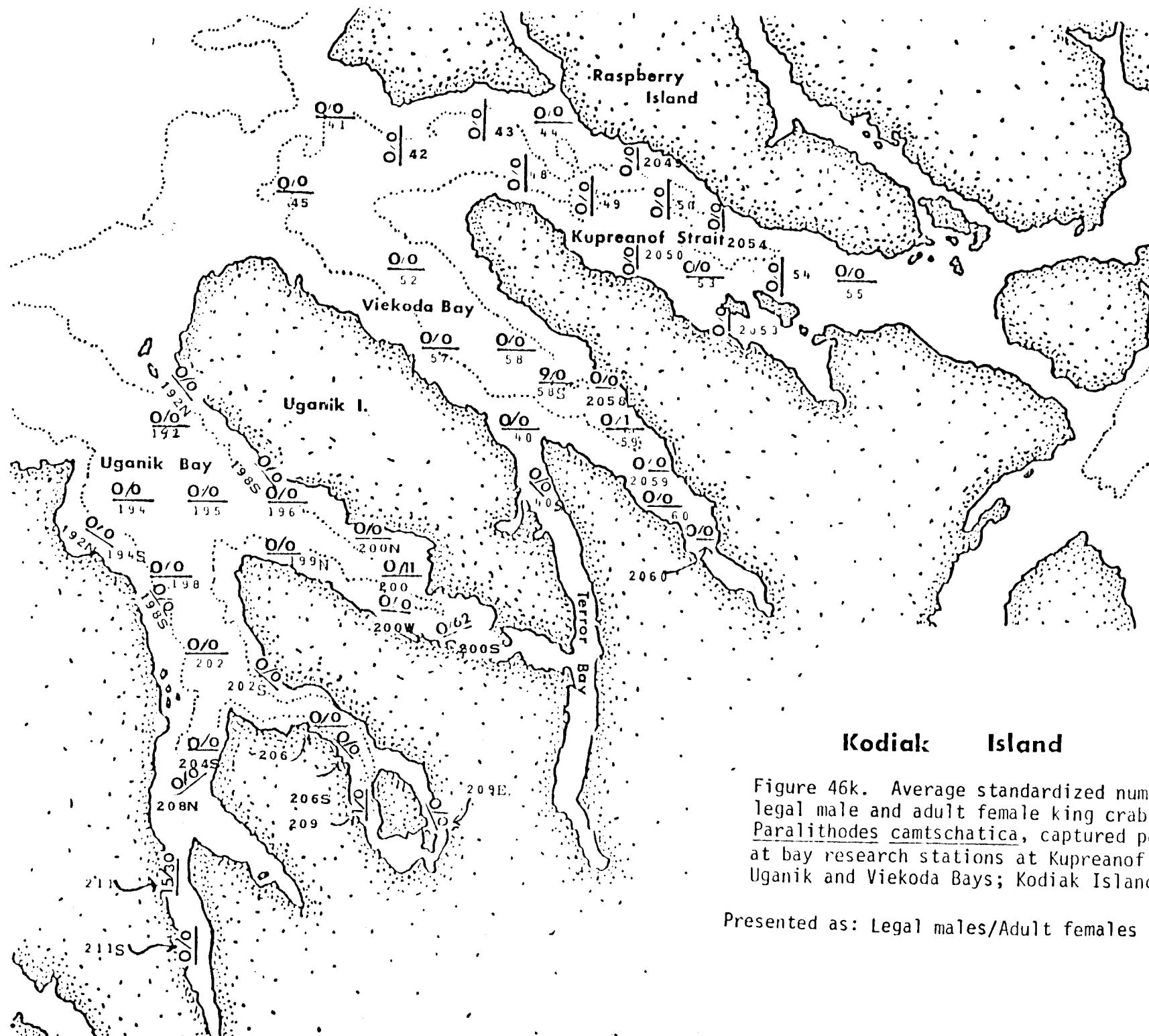
Presented as: Legal males/Adult females



### Kodiak Island

Figure 46j. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1982).

Presented as: Legal males/Adult females



Kodiak Island

Figure 46k. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1983).

Presented as: Legal males/Adult females

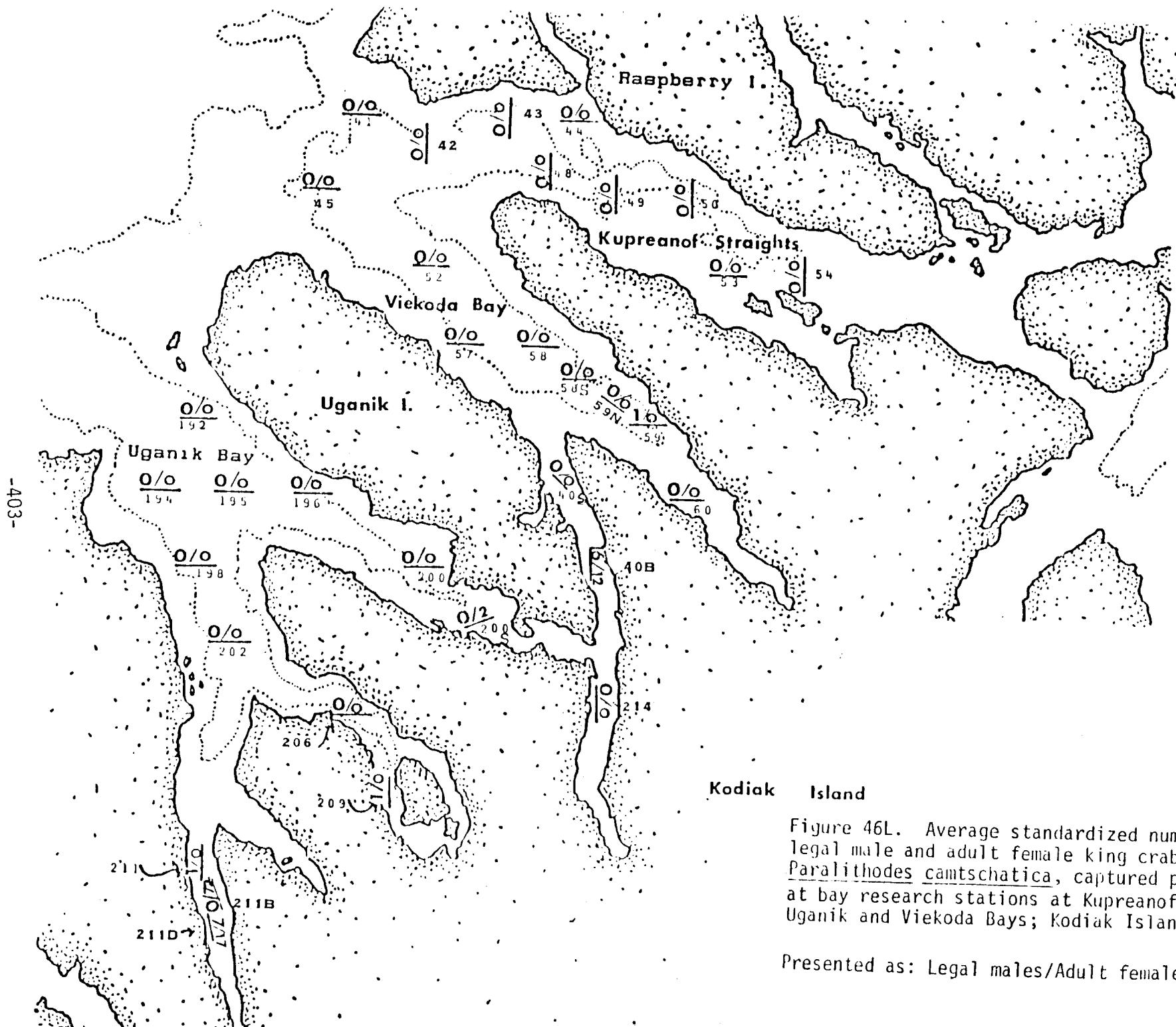


Figure 46L. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1984).

Presented as: Legal males/Adult females

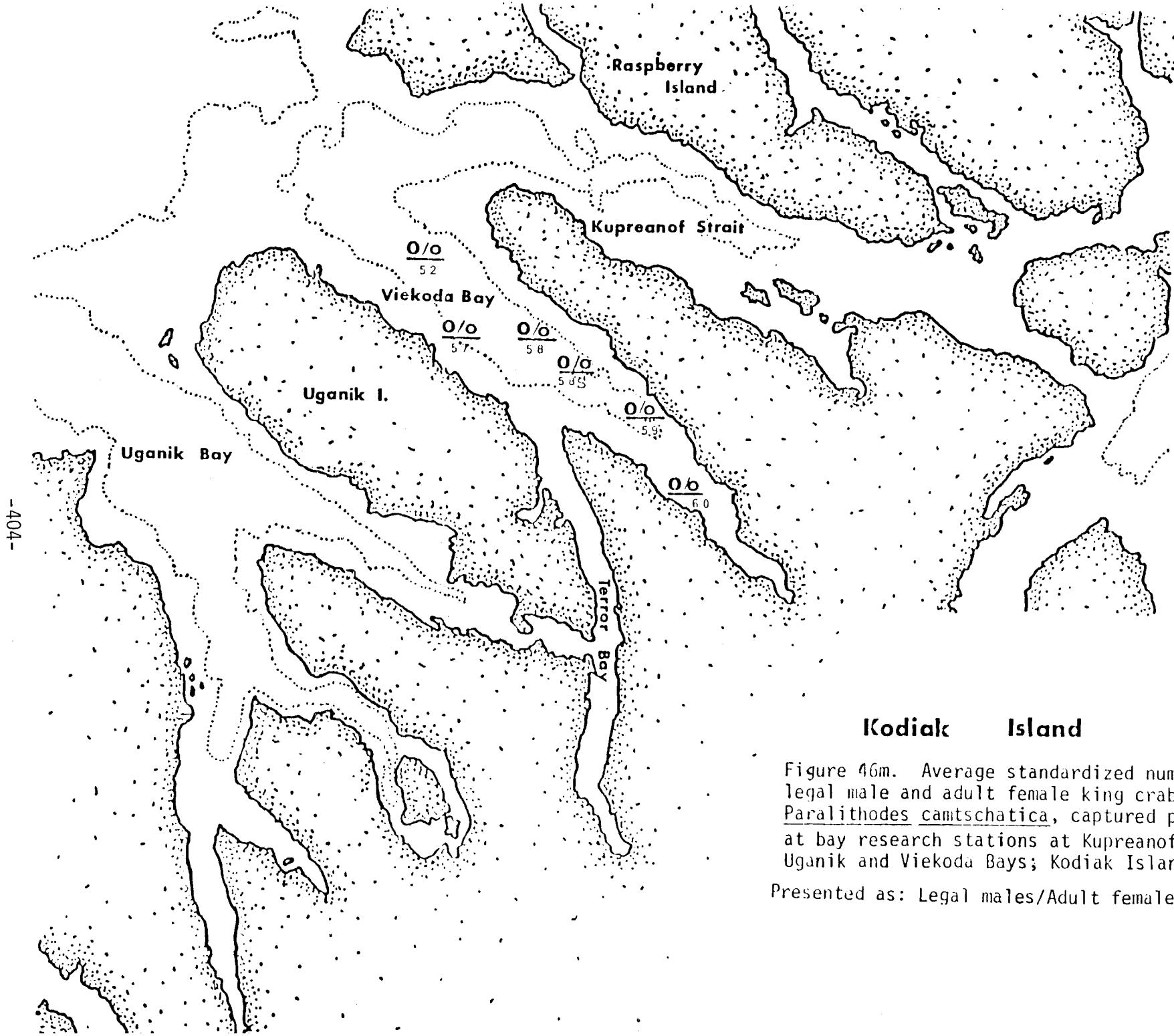
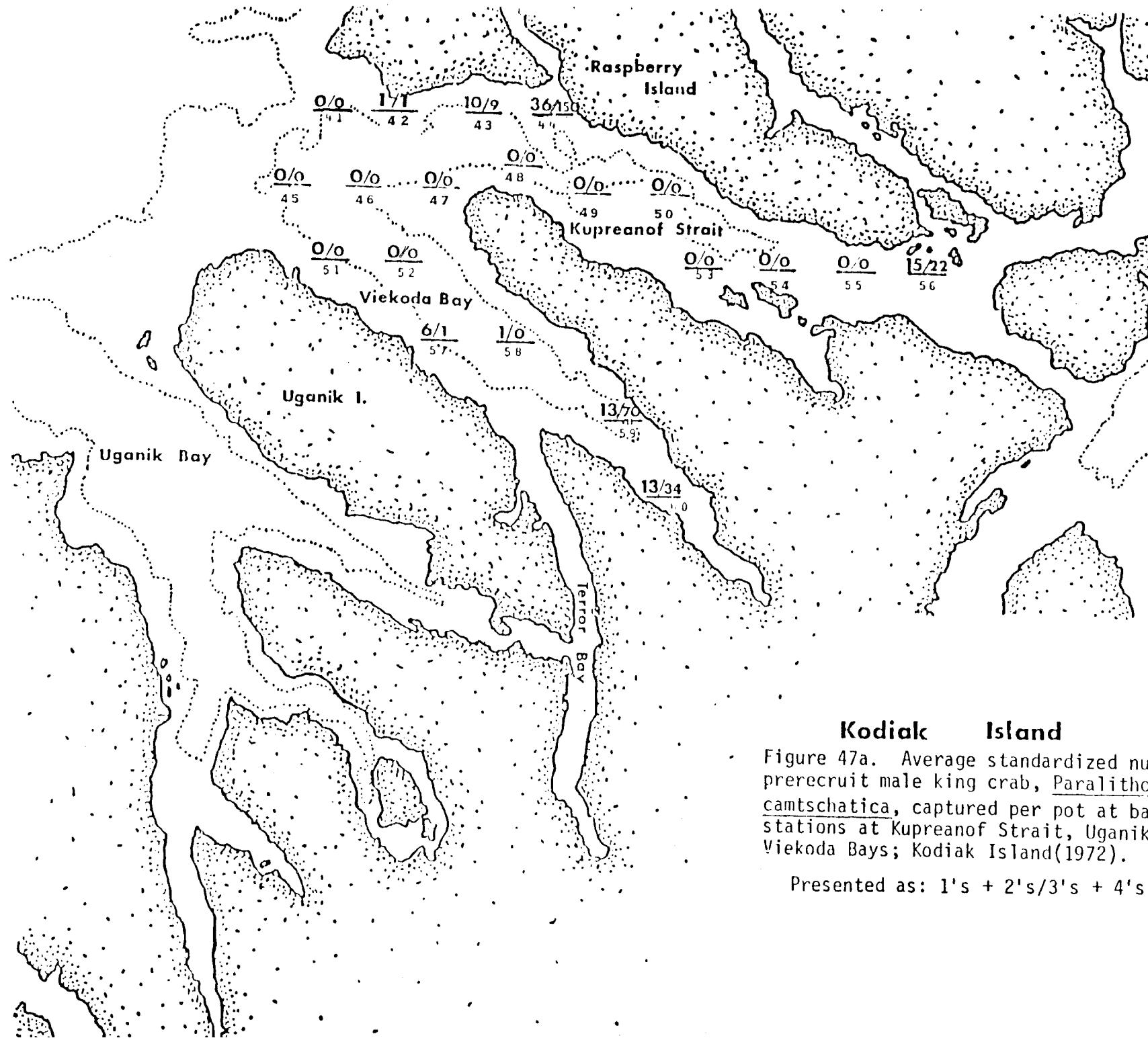


Figure 46m. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1985).

Presented as: Legal males/Adult females



### Kodiak Island

Figure 47a. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island(1972).

Presented as: 1's + 2's/3's + 4's

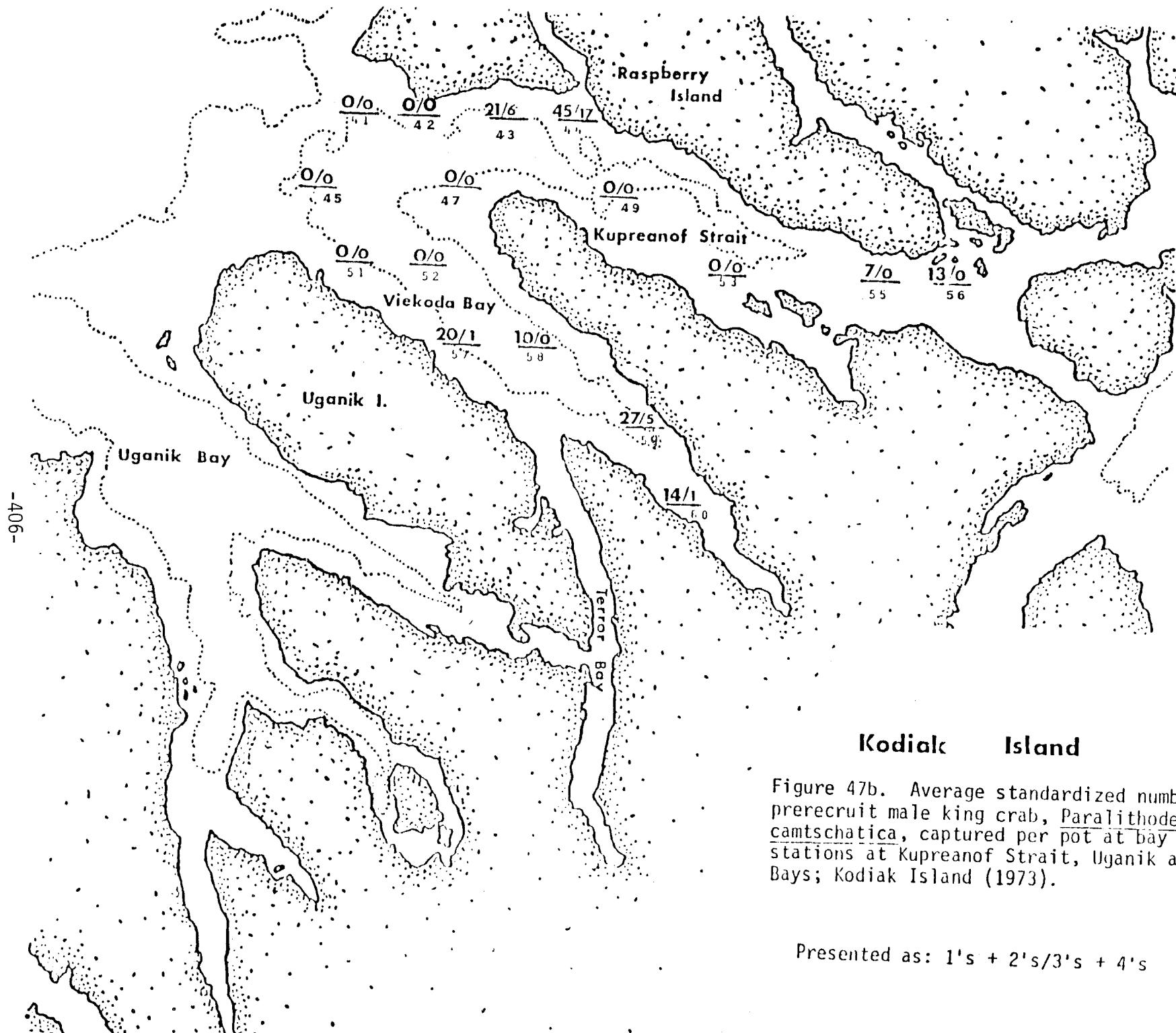
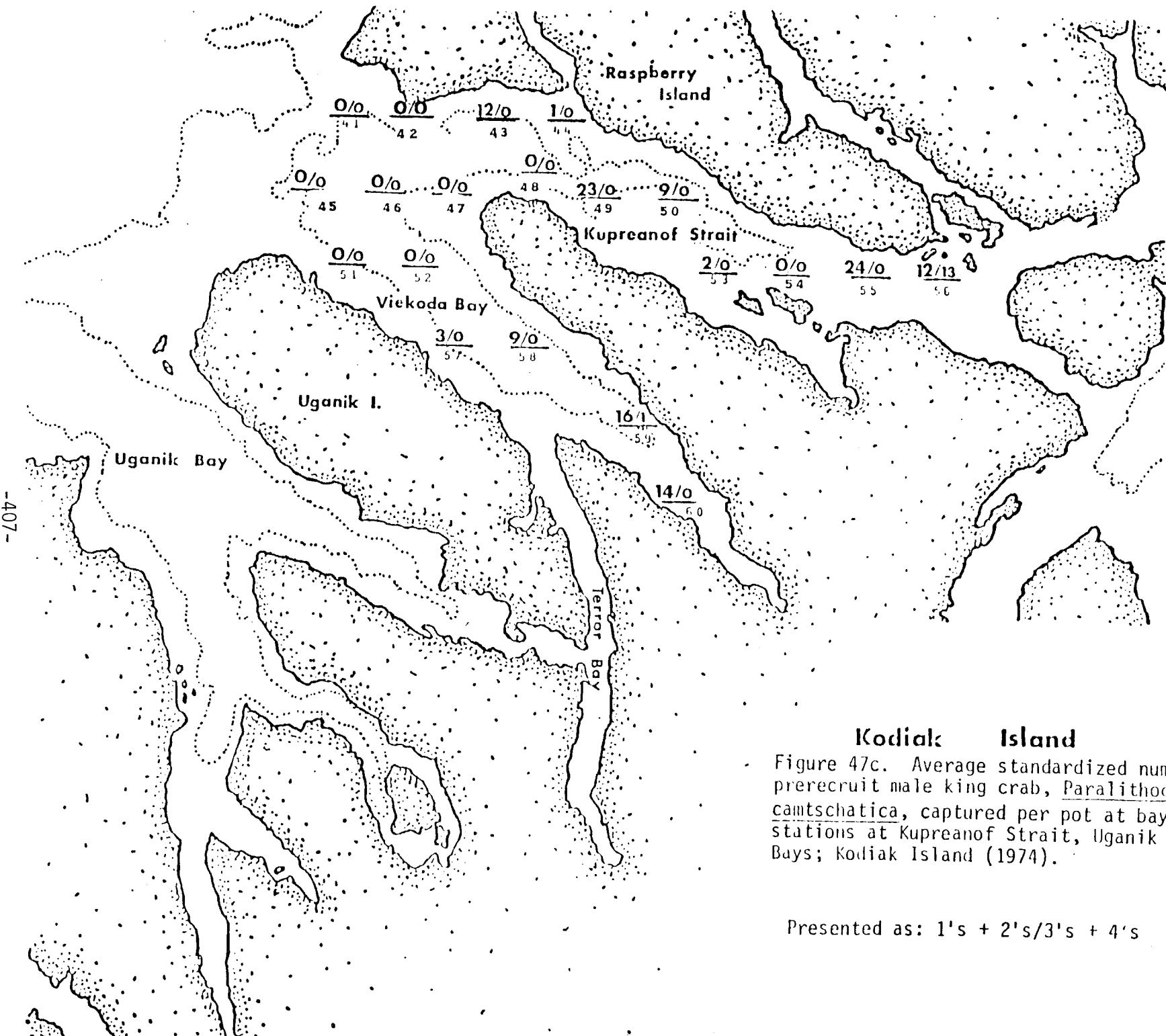


Figure 47b. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kupreanof Strait, Uganik and Vickoda Bays; Kodiak Island (1973).

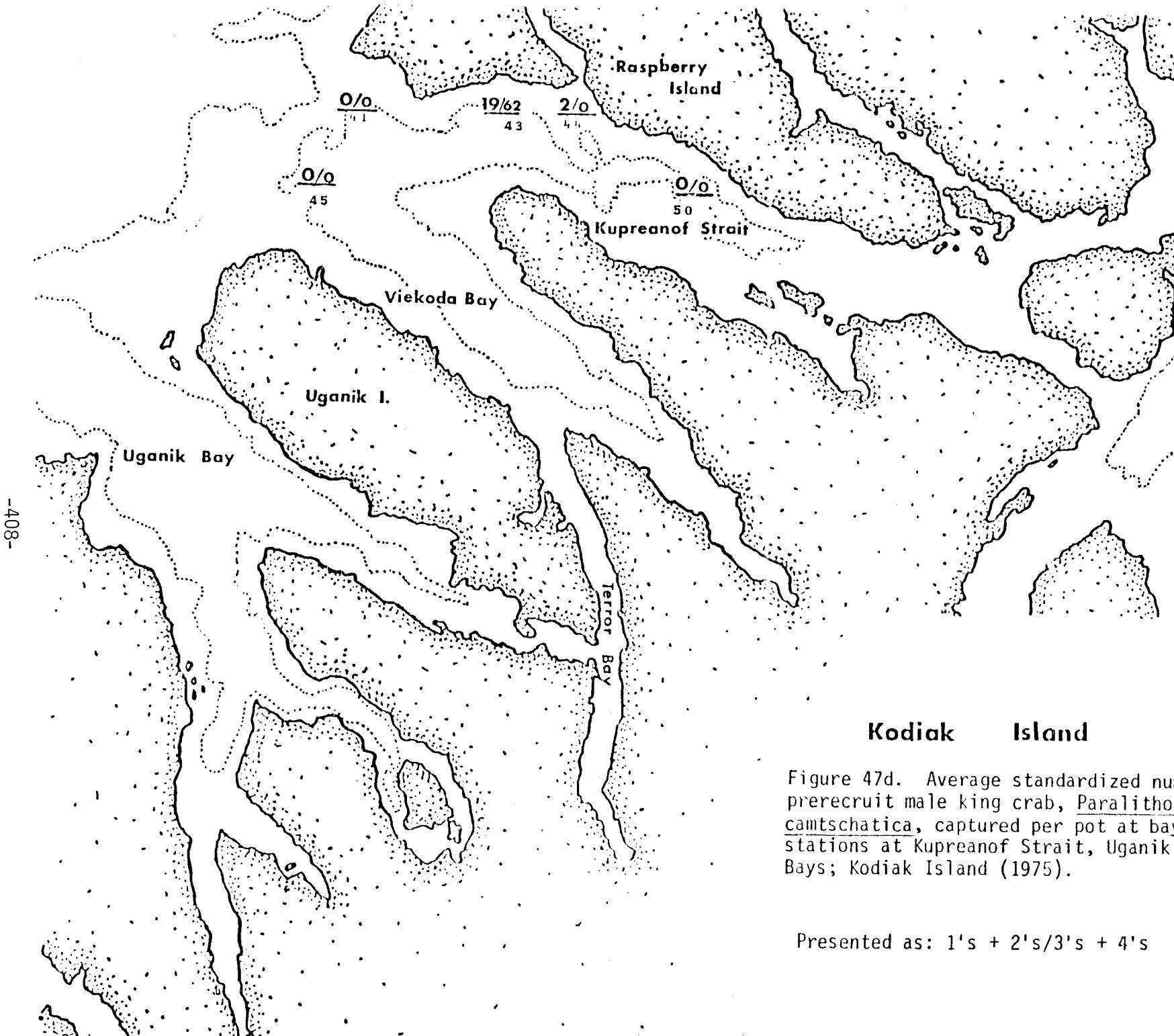
Presented as: 1's + 2's/3's + 4's



### Kodiak Island

Figure 47c. Average standardized number of prae-recruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1974).

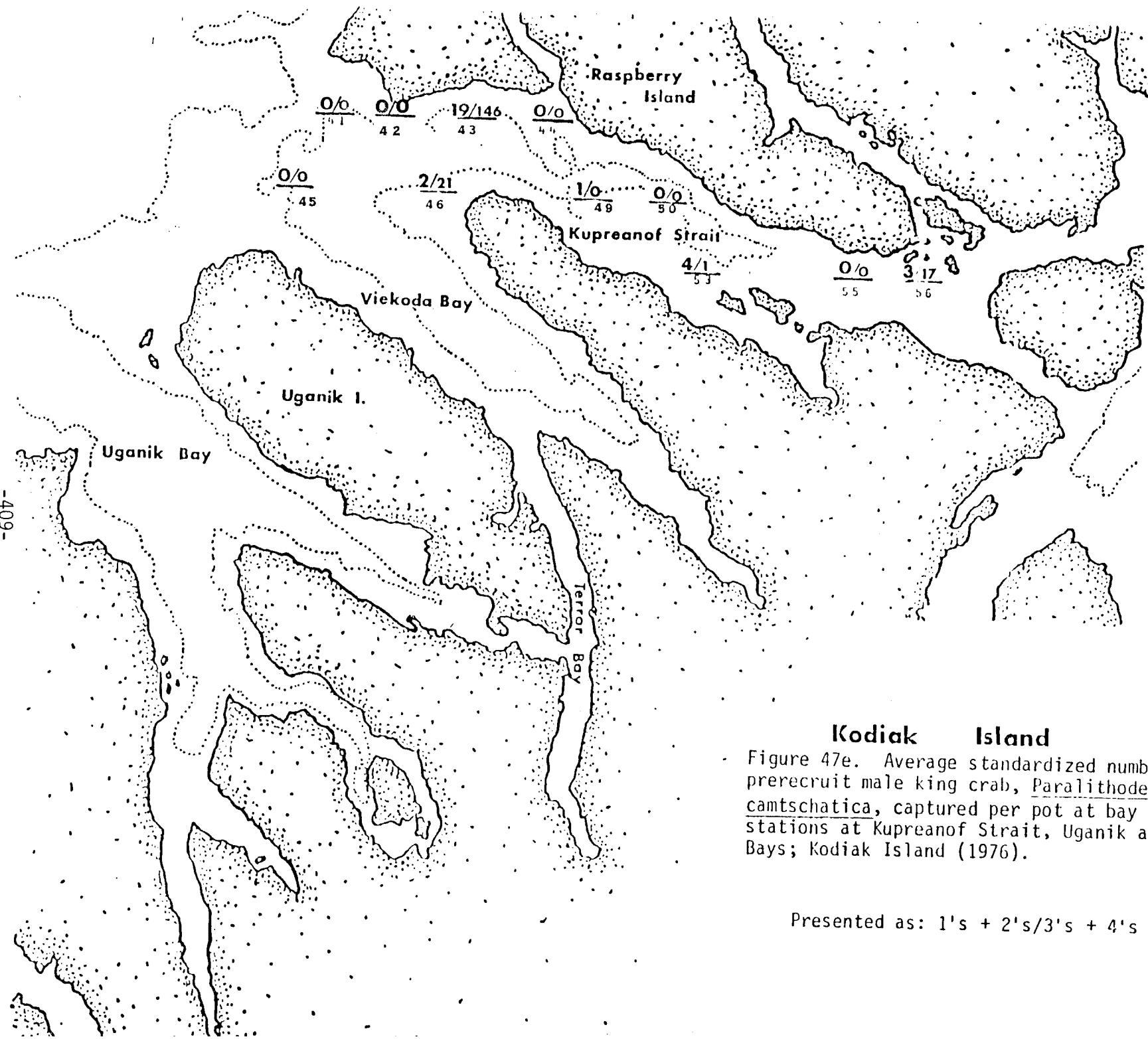
Presented as: 1's + 2's/3's + 4's



### Kodiak Island

Figure 47d. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1975).

Presented as: 1's + 2's/3's + 4's



### Kodiak Island

Figure 47e. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1976).

Presented as: 1's + 2's/3's + 4's

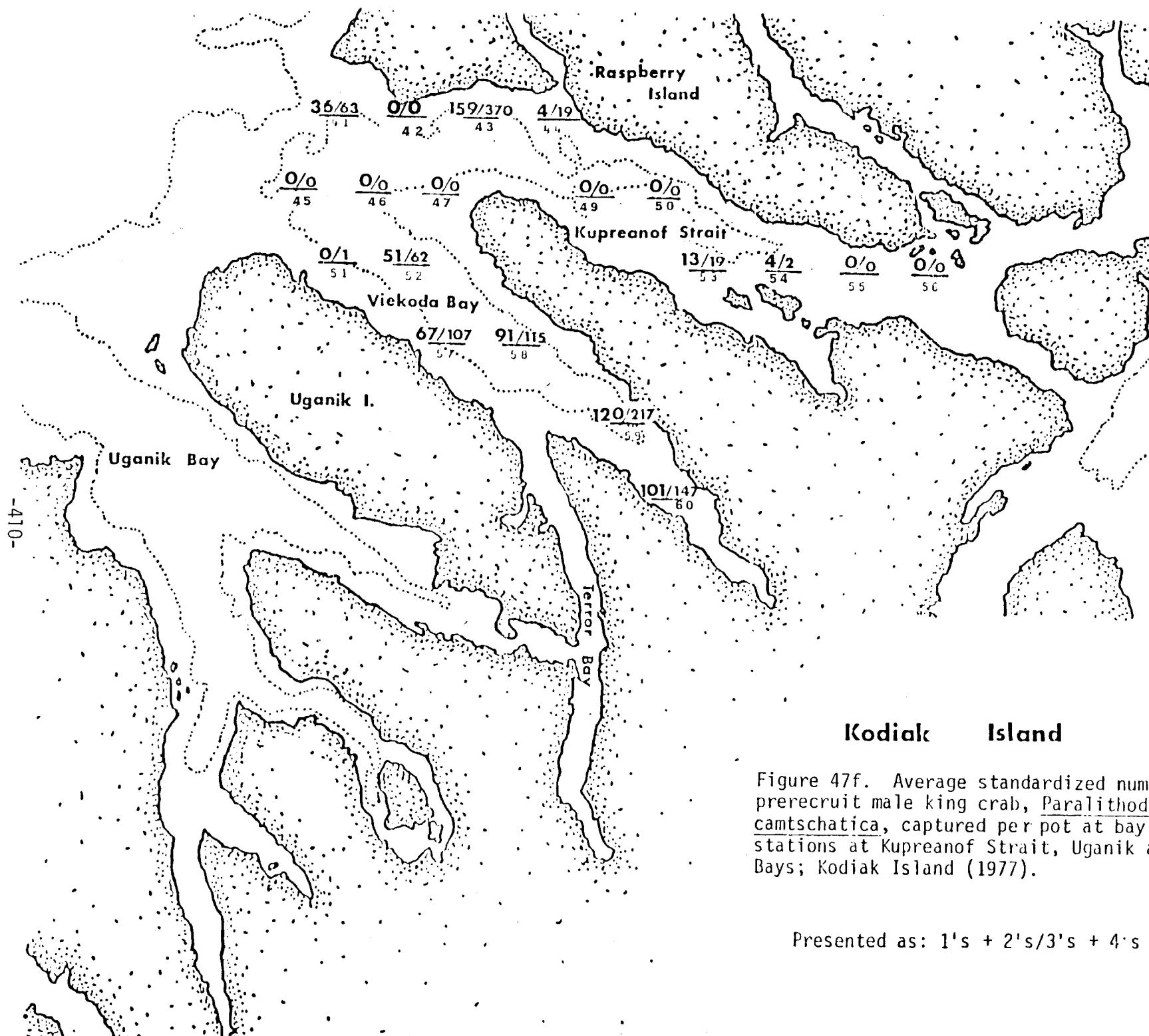
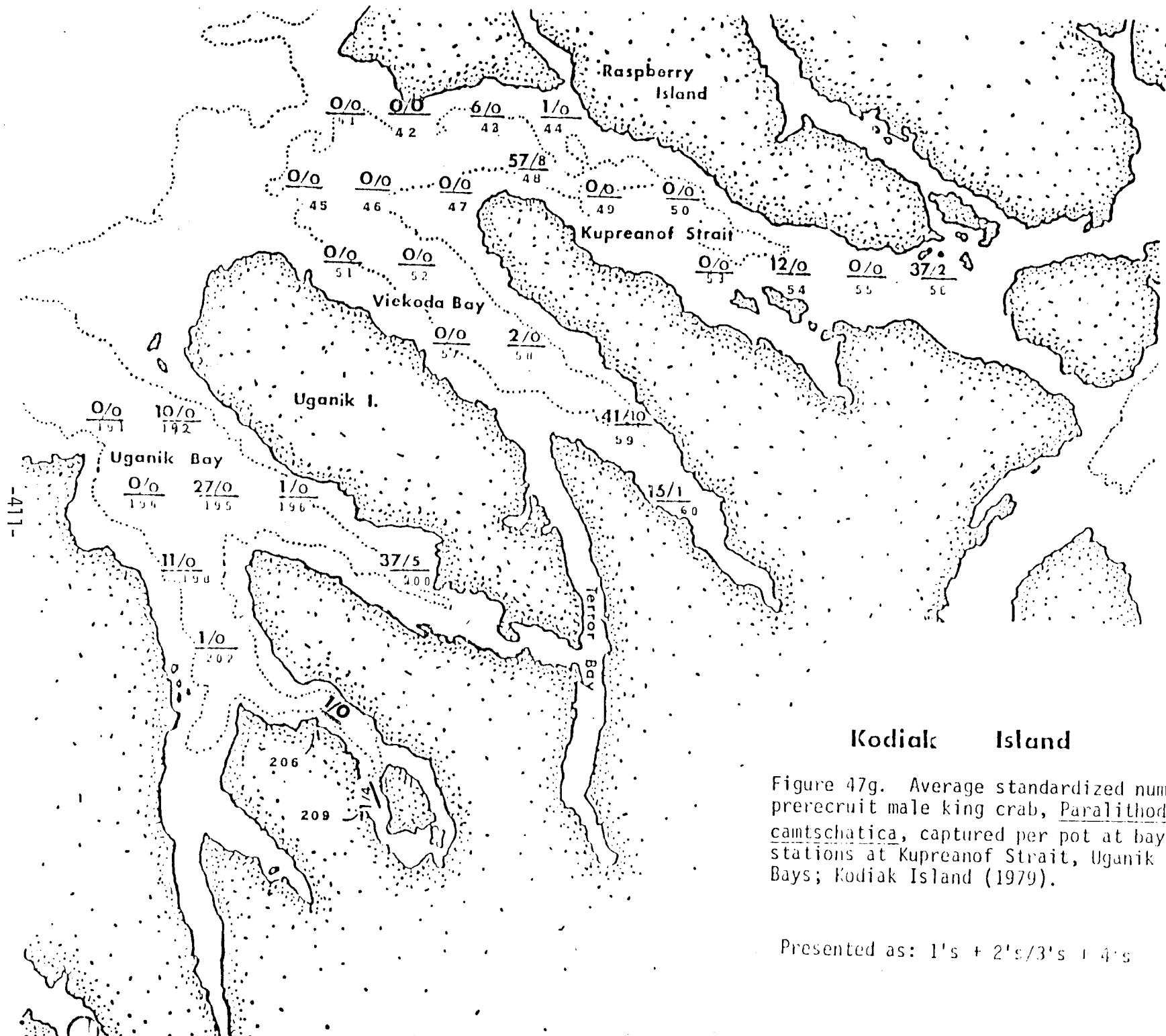


Figure 47f. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1977).

Presented as: 1's + 2's/3's + 4's



## Kodiak Island

Figure 47g. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1979).

Presented as: 1's + 2's/3's + 4's

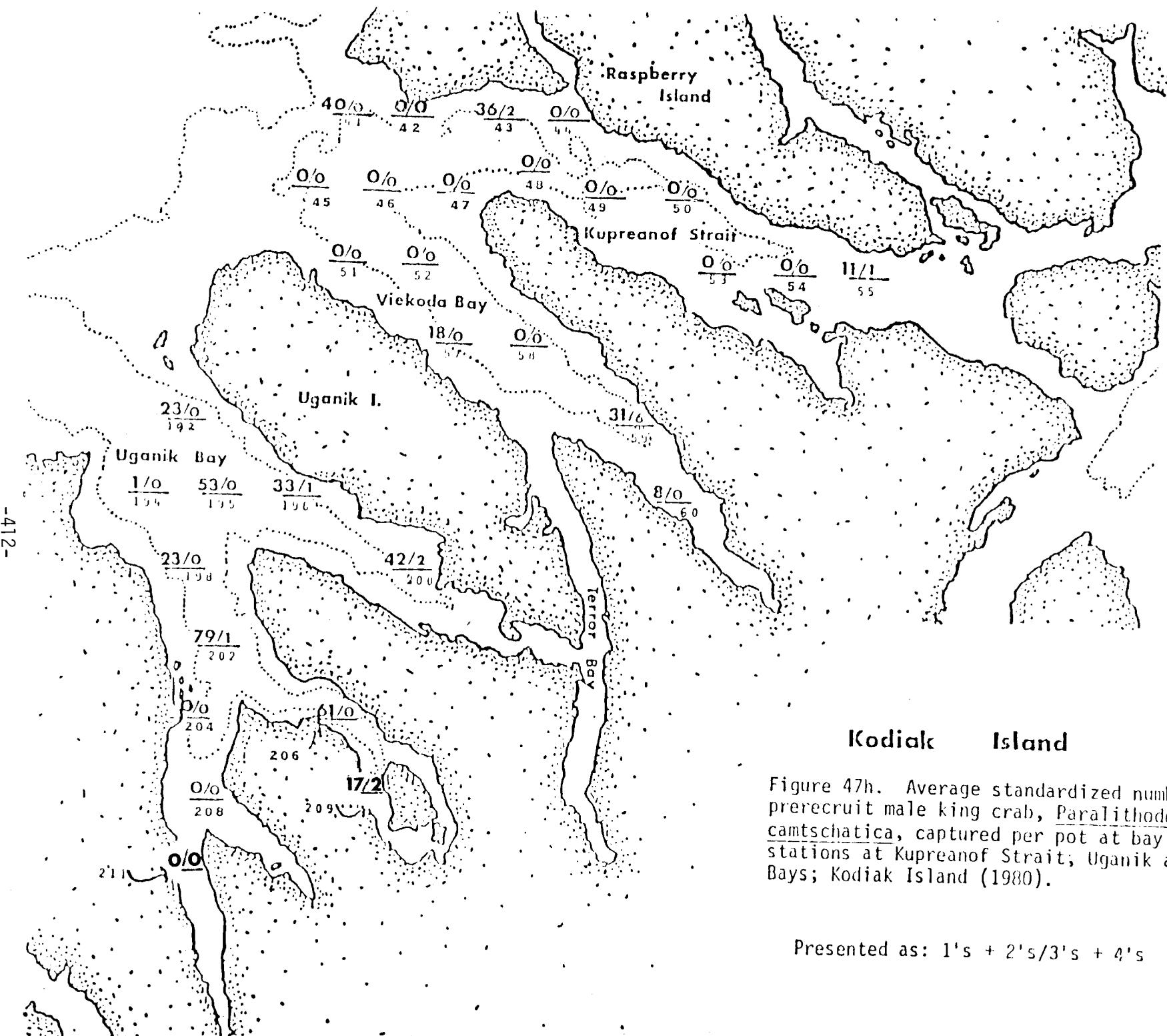


Figure 47h. Average standardized number of prae-recruit male king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1980).

Presented as: 1's + 2's/3's + 4's

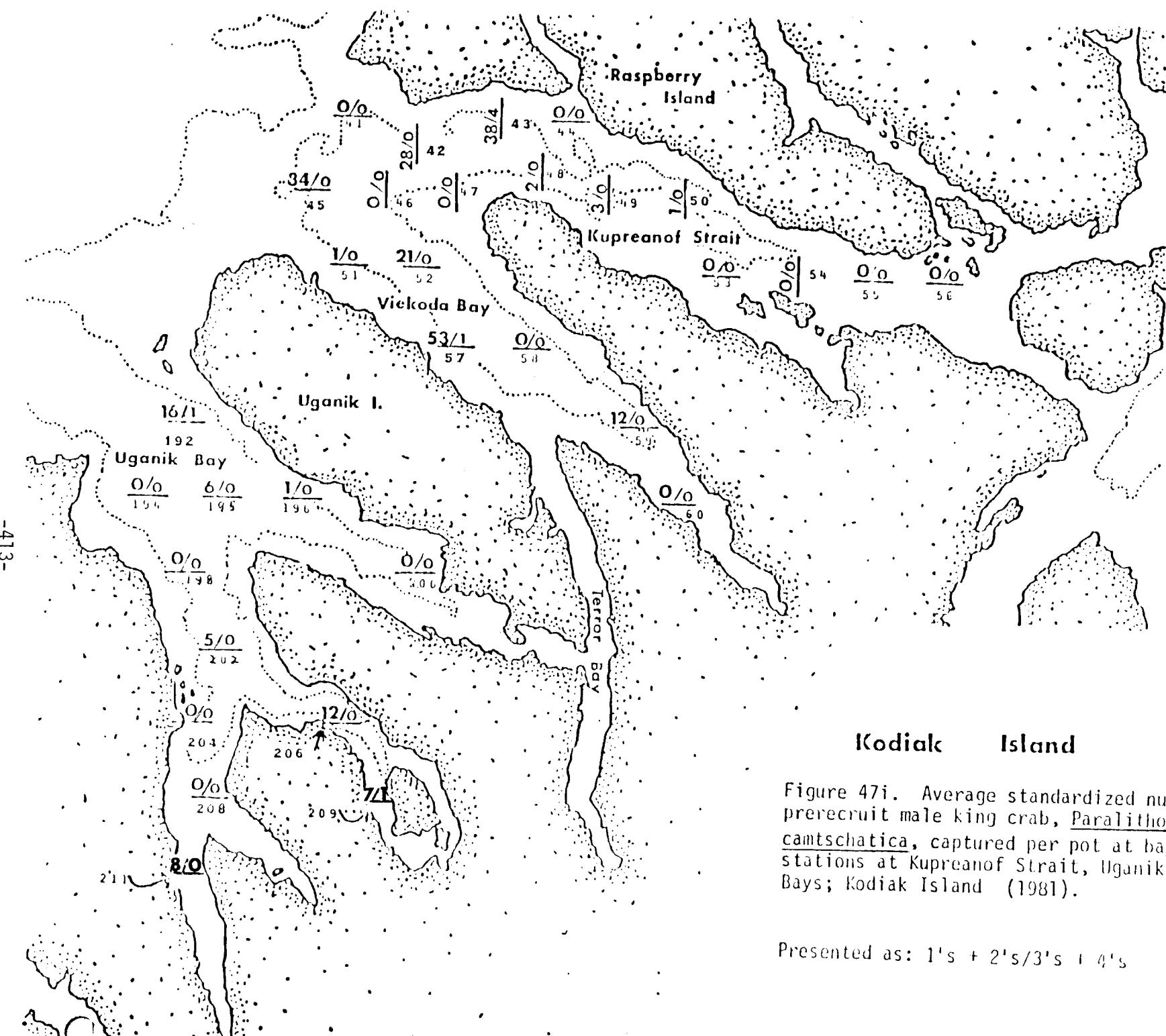
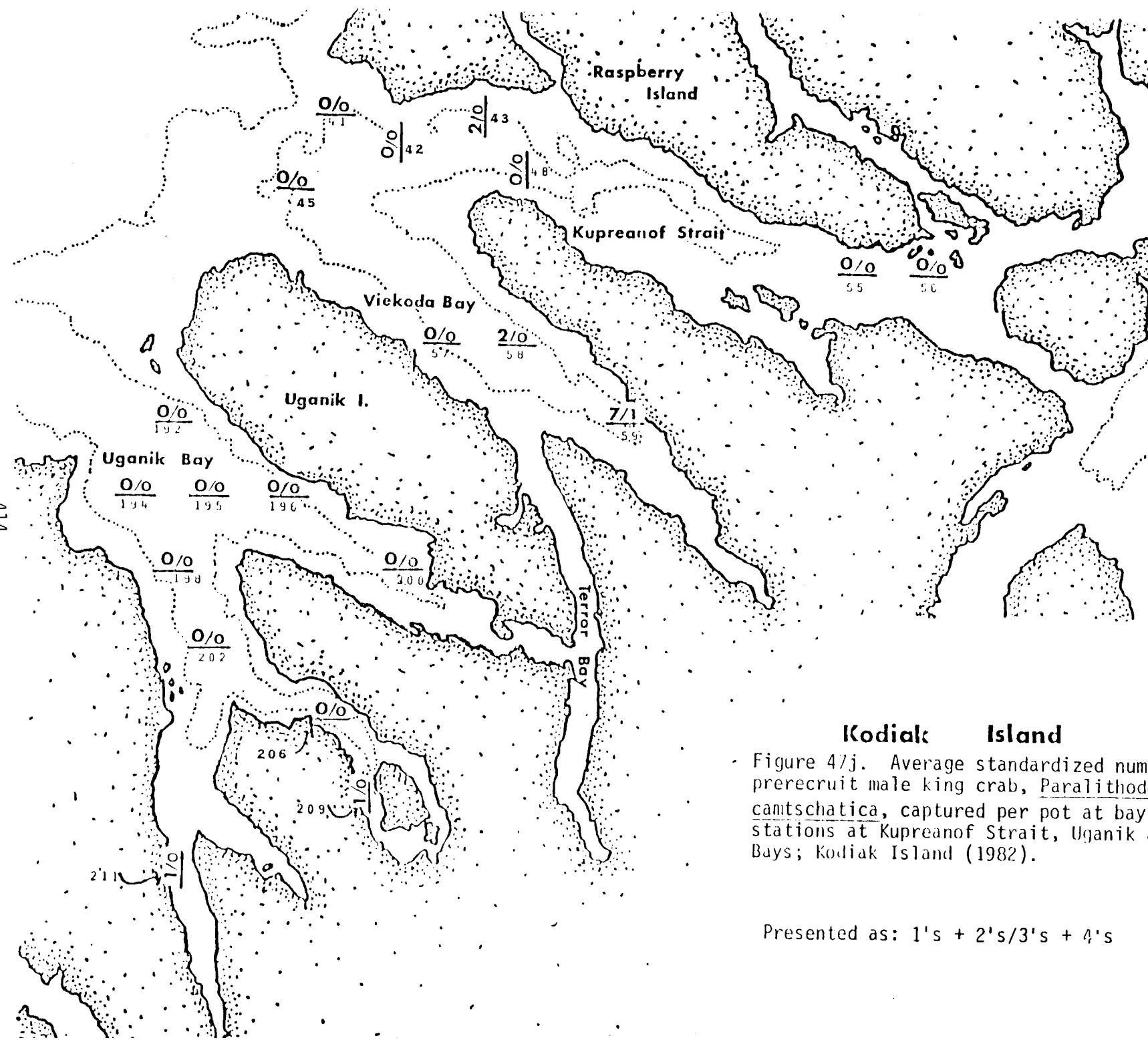


Figure 47i. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kupreanof Strait, Uganik and Vickoda Bays; Kodiak Island (1981).

Presented as: 1's + 2's/3's + 4's



### Kodiak Island

Figure 47j. Average standardized number of prae-recruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1982).

Presented as: 1's + 2's/3's + 4's

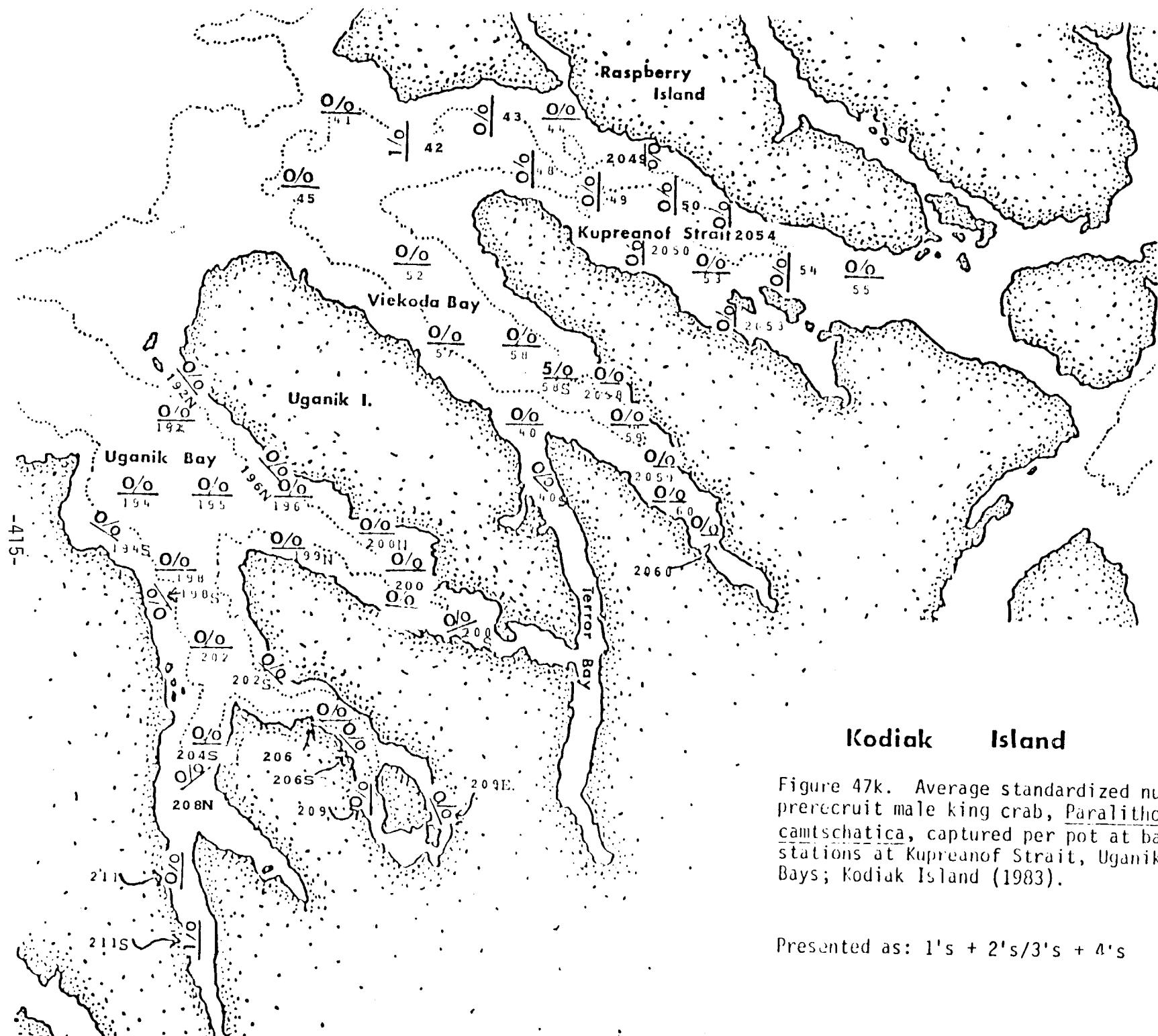


Figure 47k. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1983).

Presented as: 1's + 2's/3's + 4's

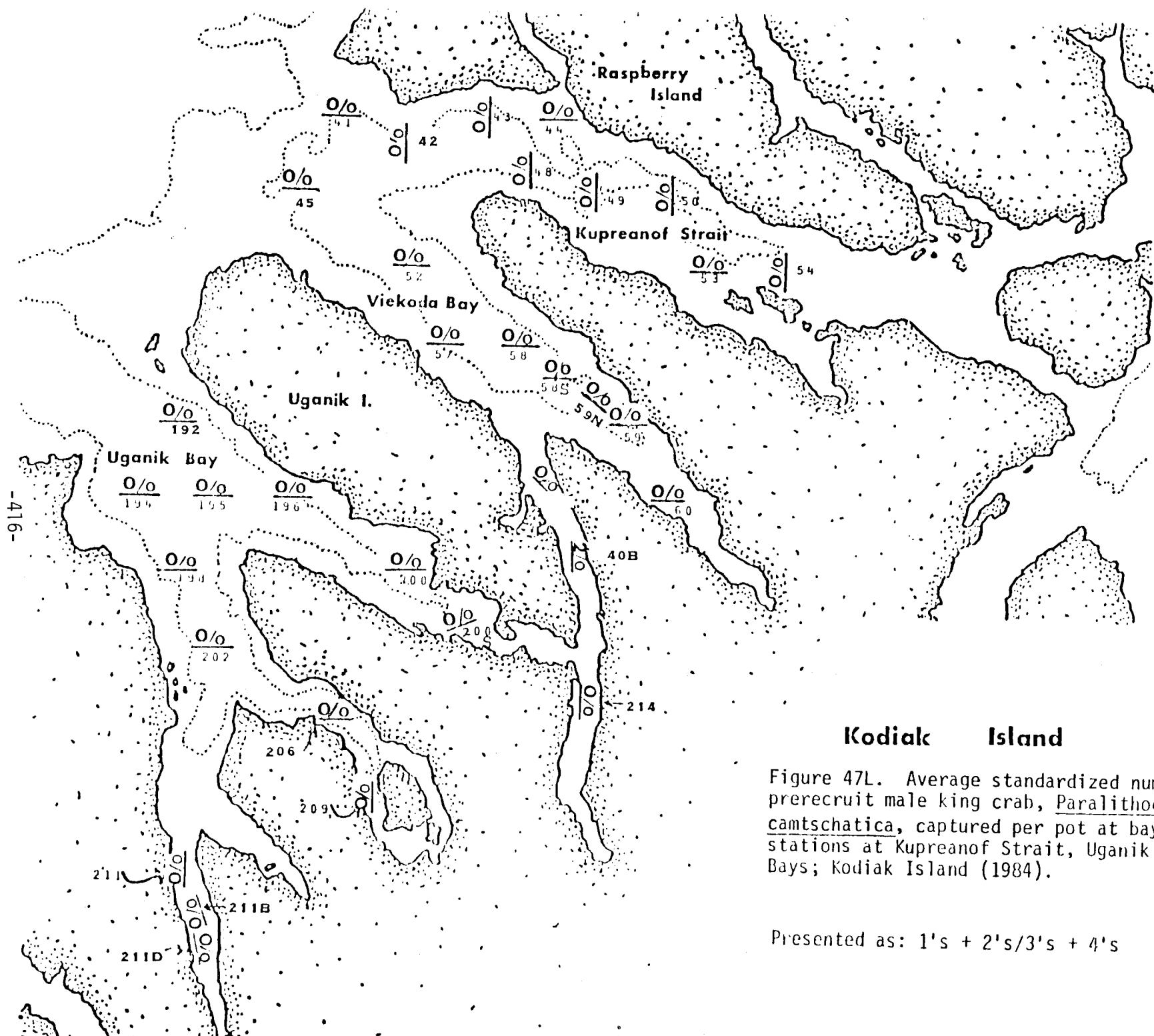
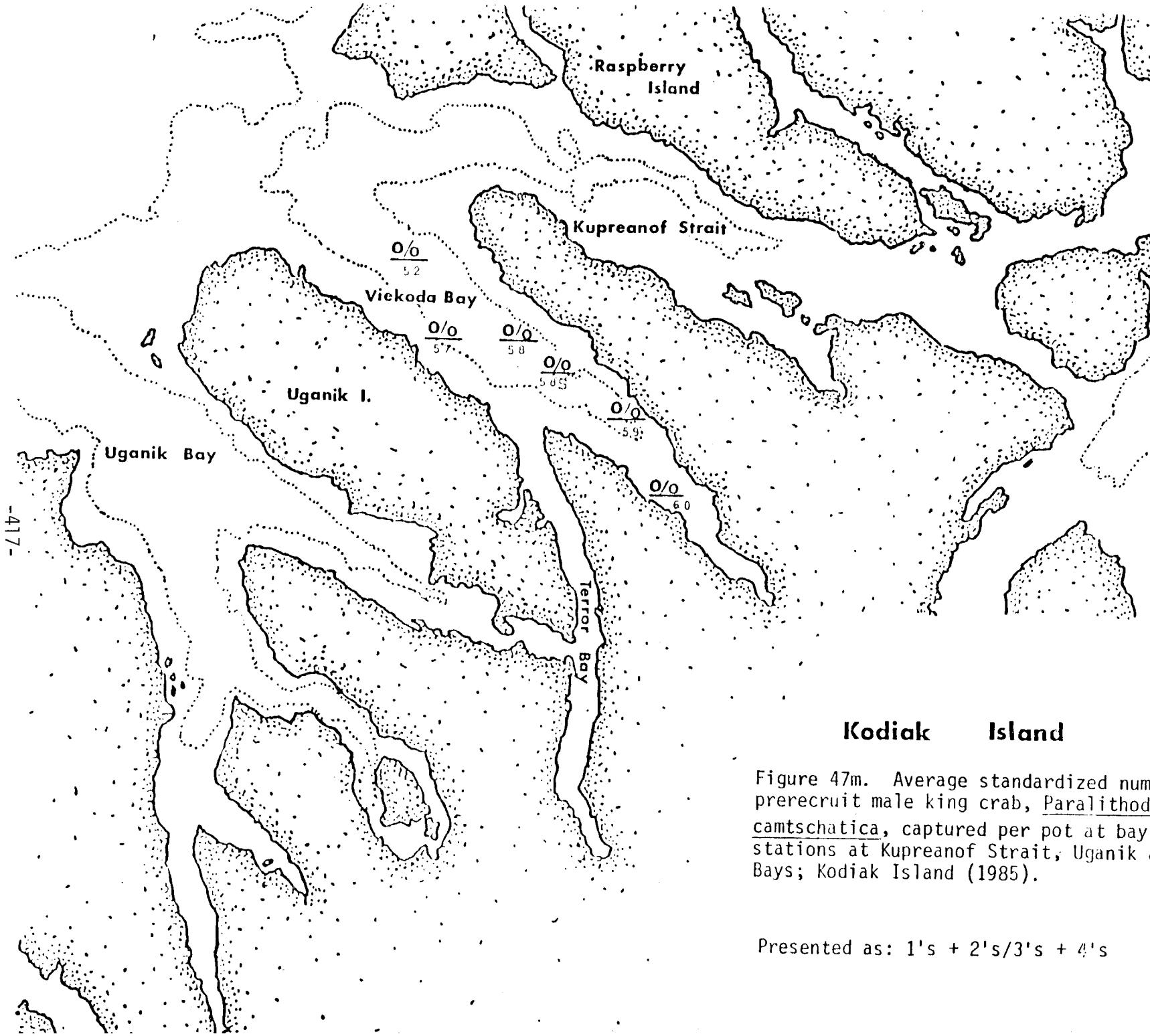


Figure 47L. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1984).

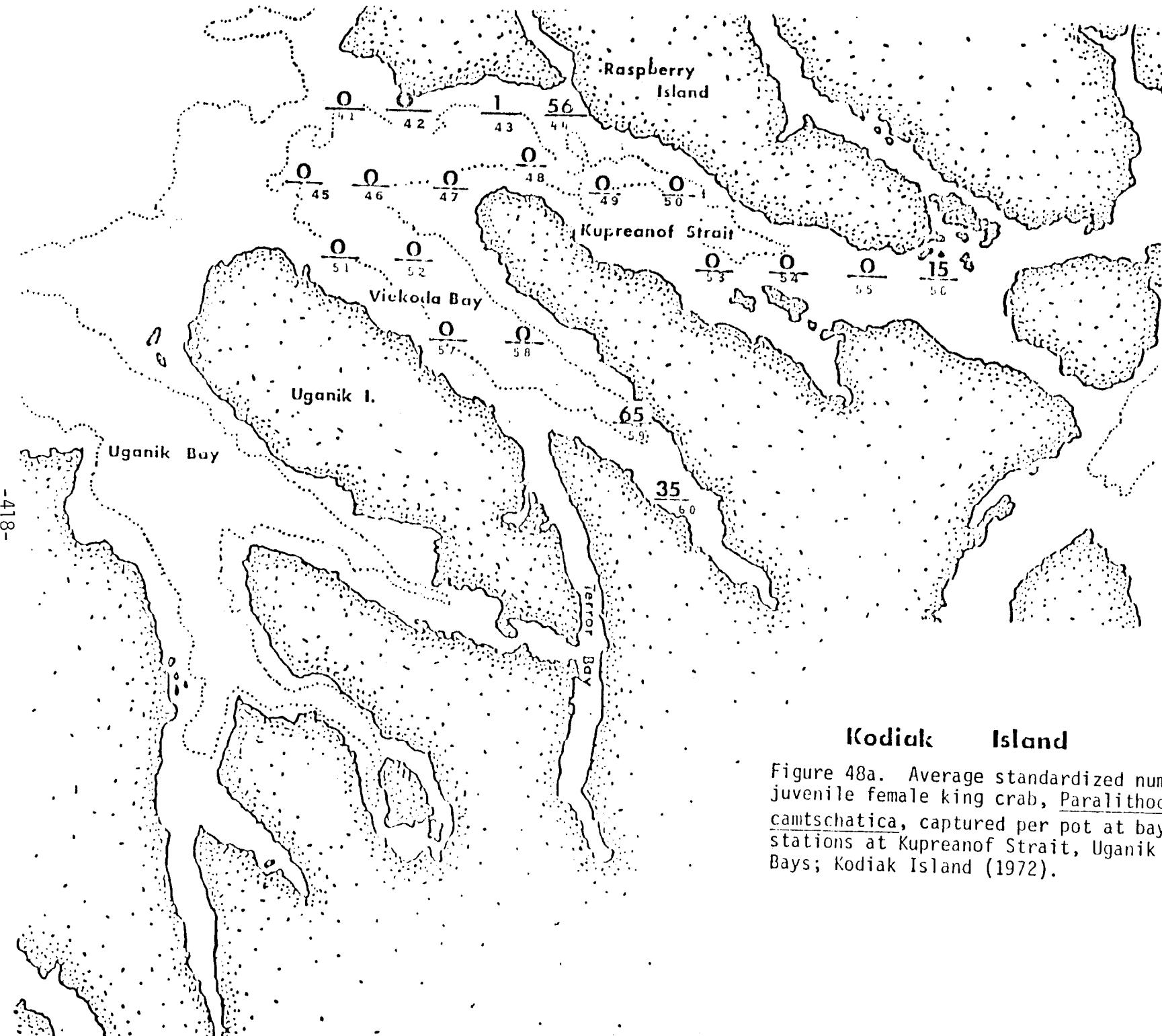
Presented as: 1's + 2's/3's + 4's



### Kodiak Island

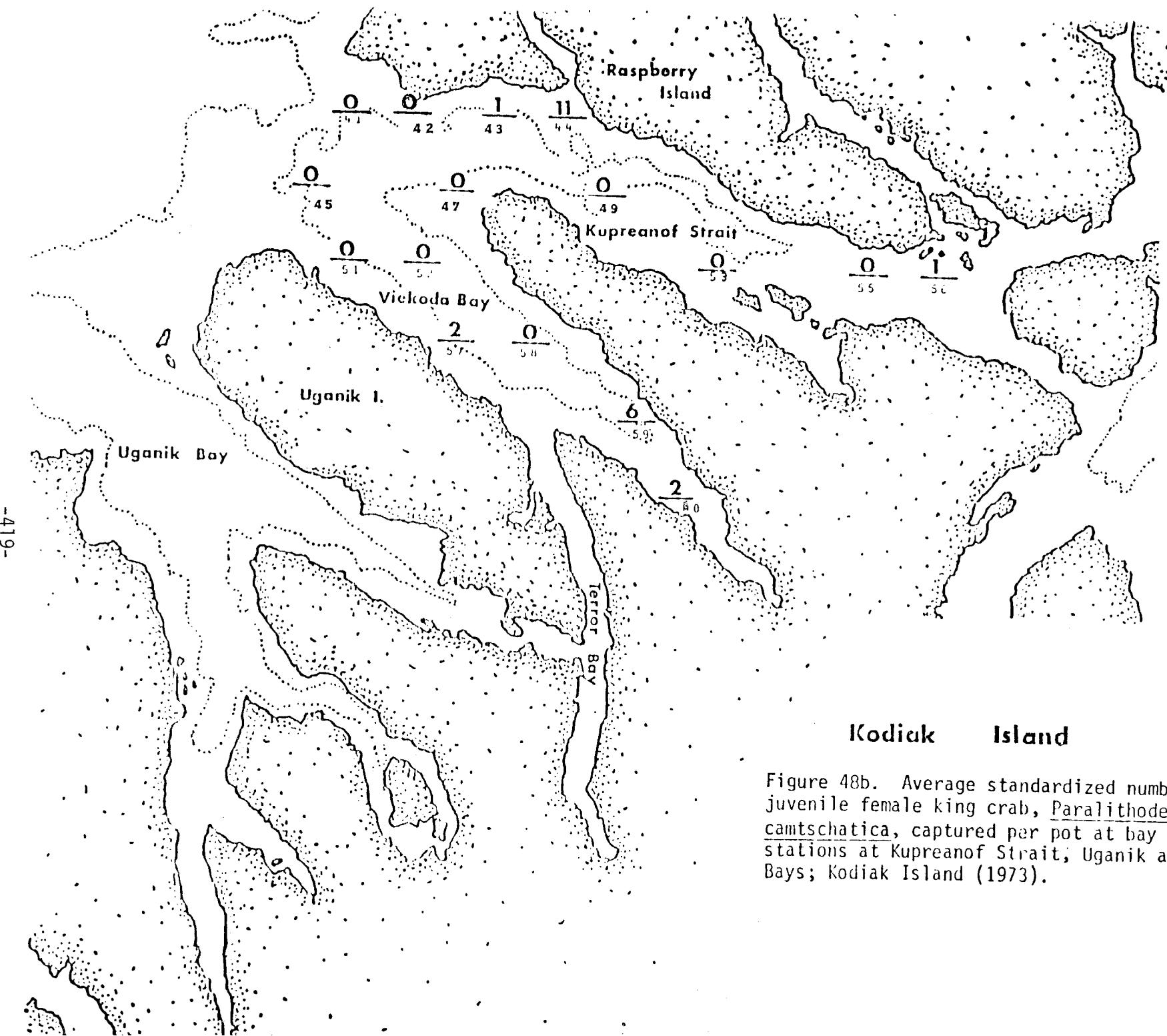
Figure 47m. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1985).

Presented as: 1's + 2's/3's + 4's



### Kodiak Island

Figure 48a. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1972).



### Kodiak Island

Figure 48b. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1973).

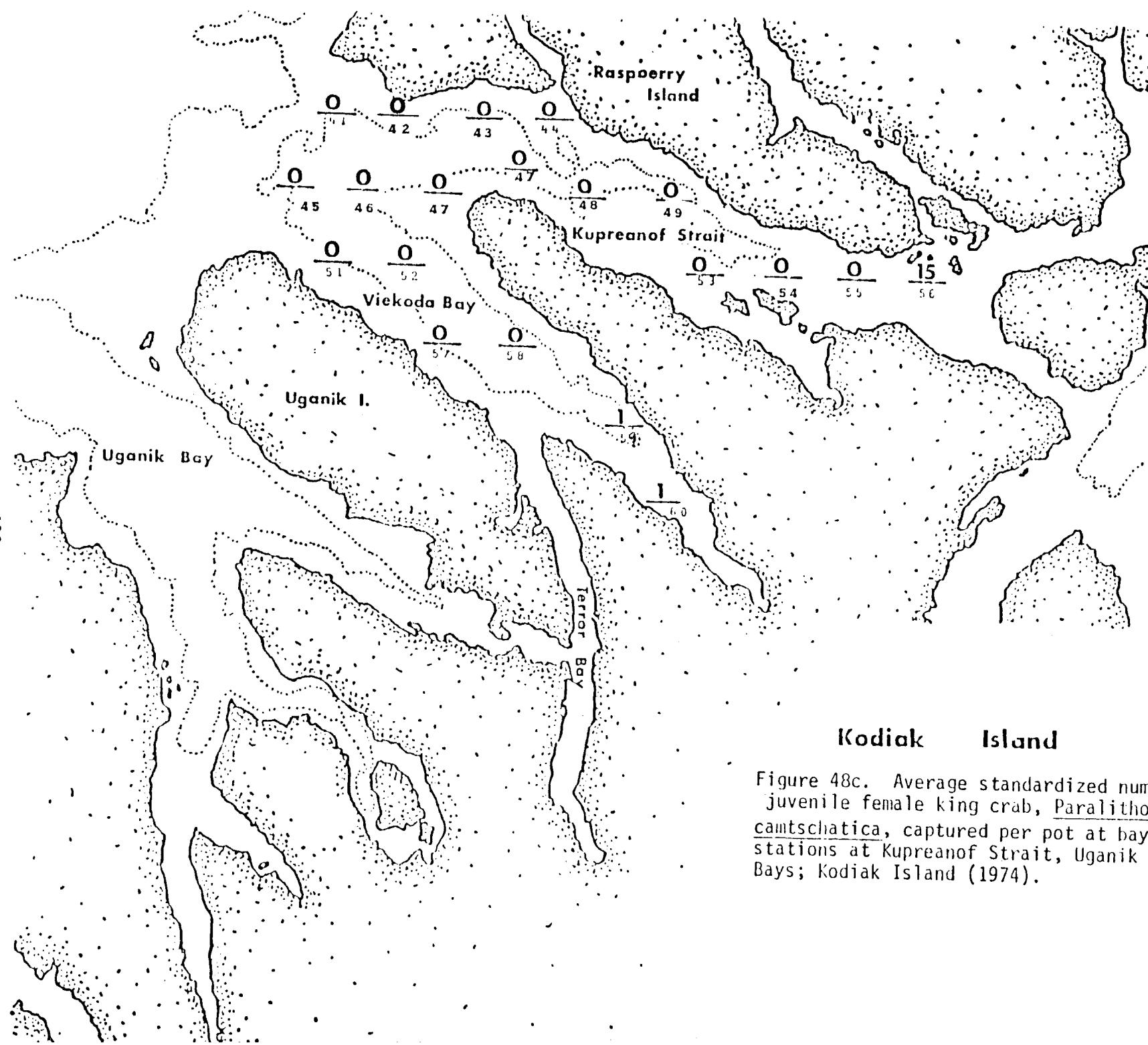
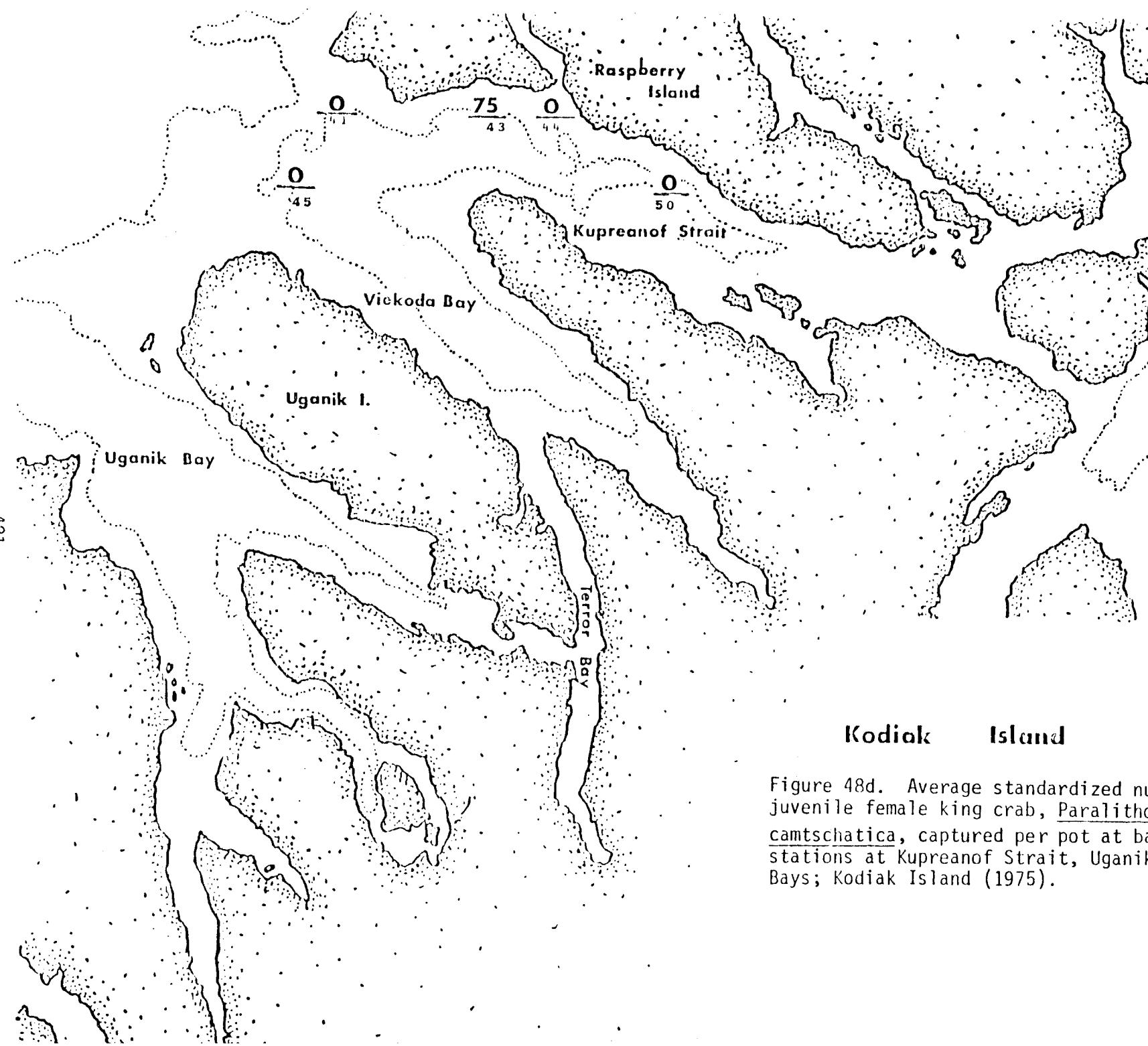
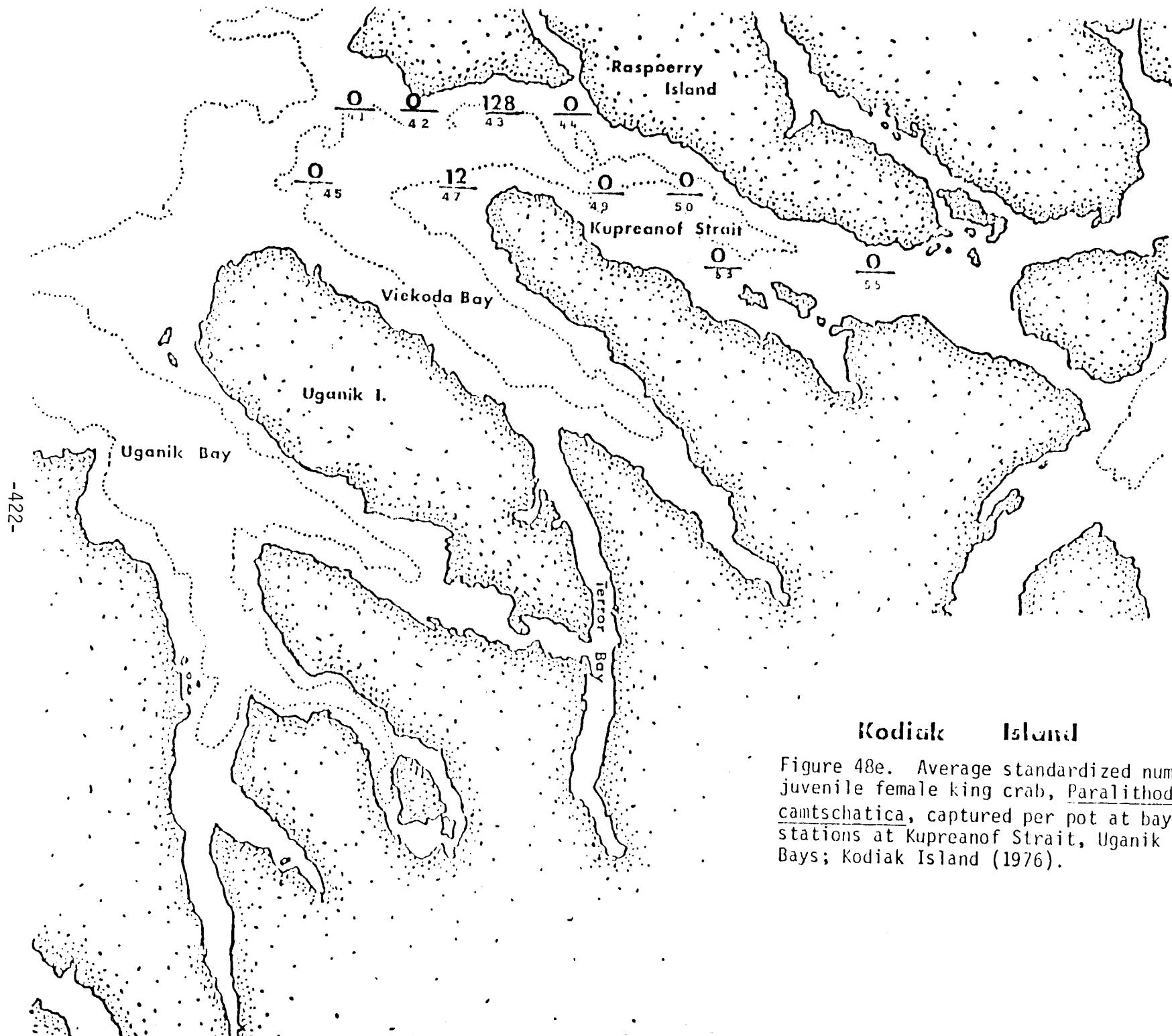


Figure 48c. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1974).



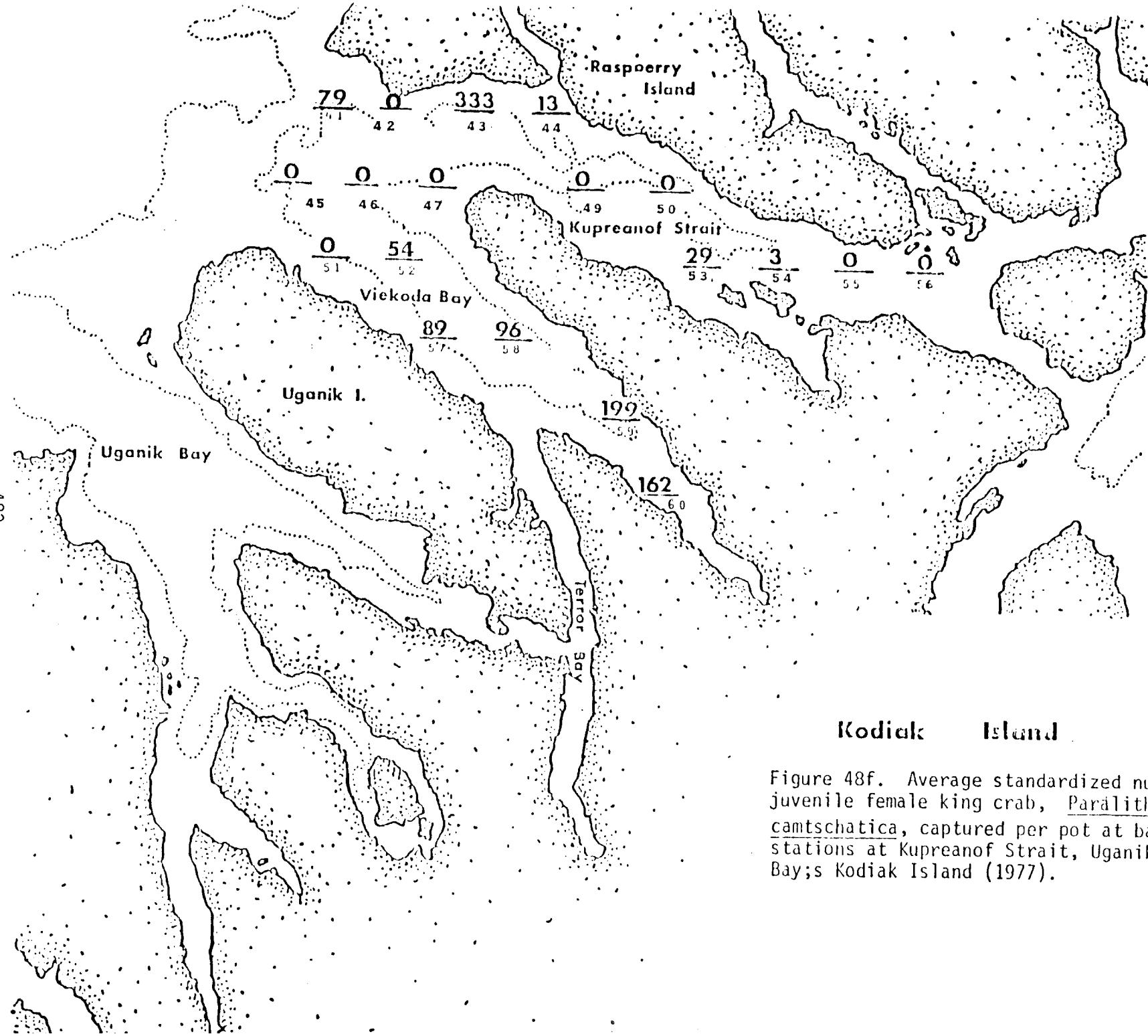
### Kodiak Island

Figure 48d. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1975).



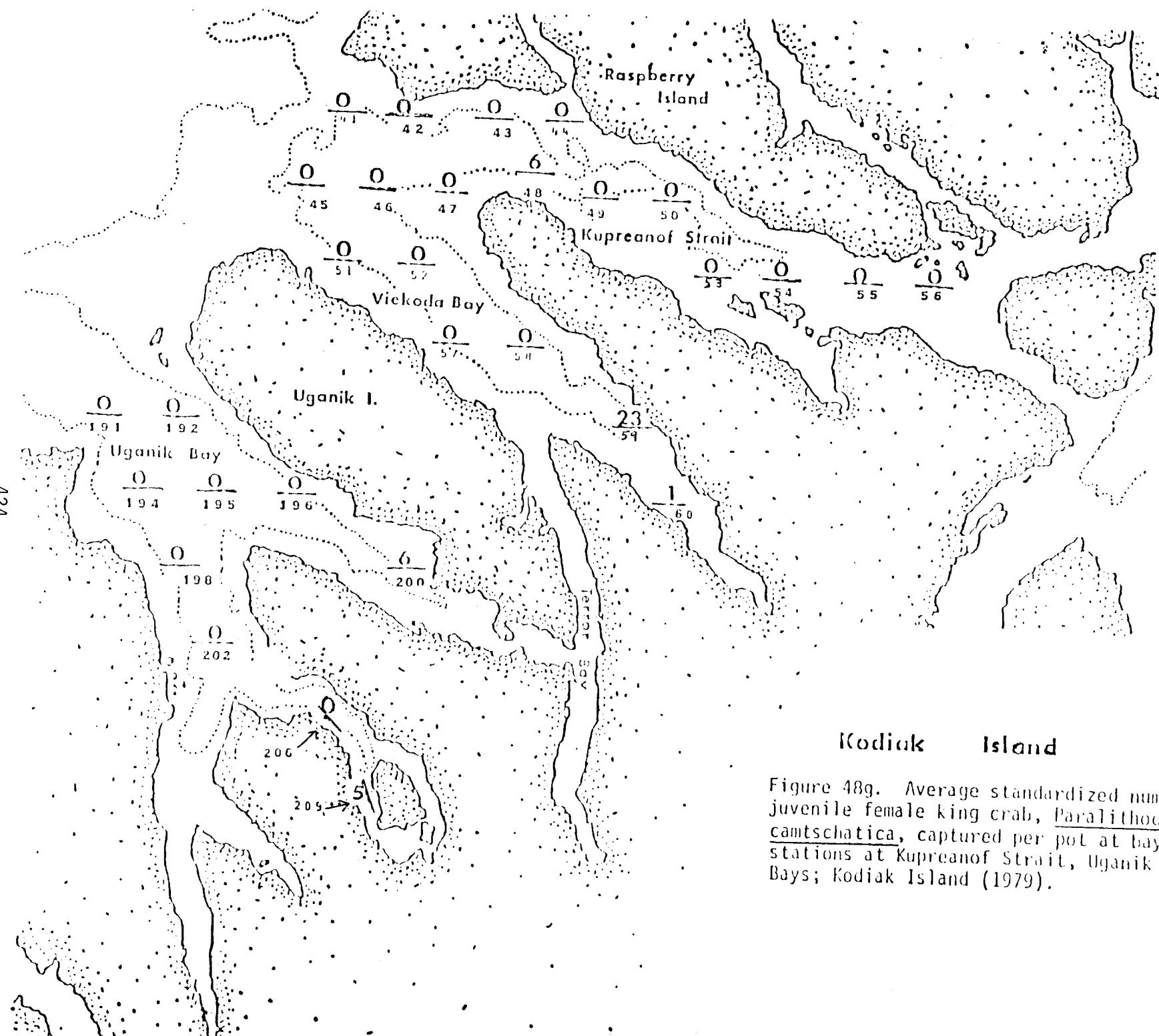
### Kodiak Island

Figure 48e. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1976).



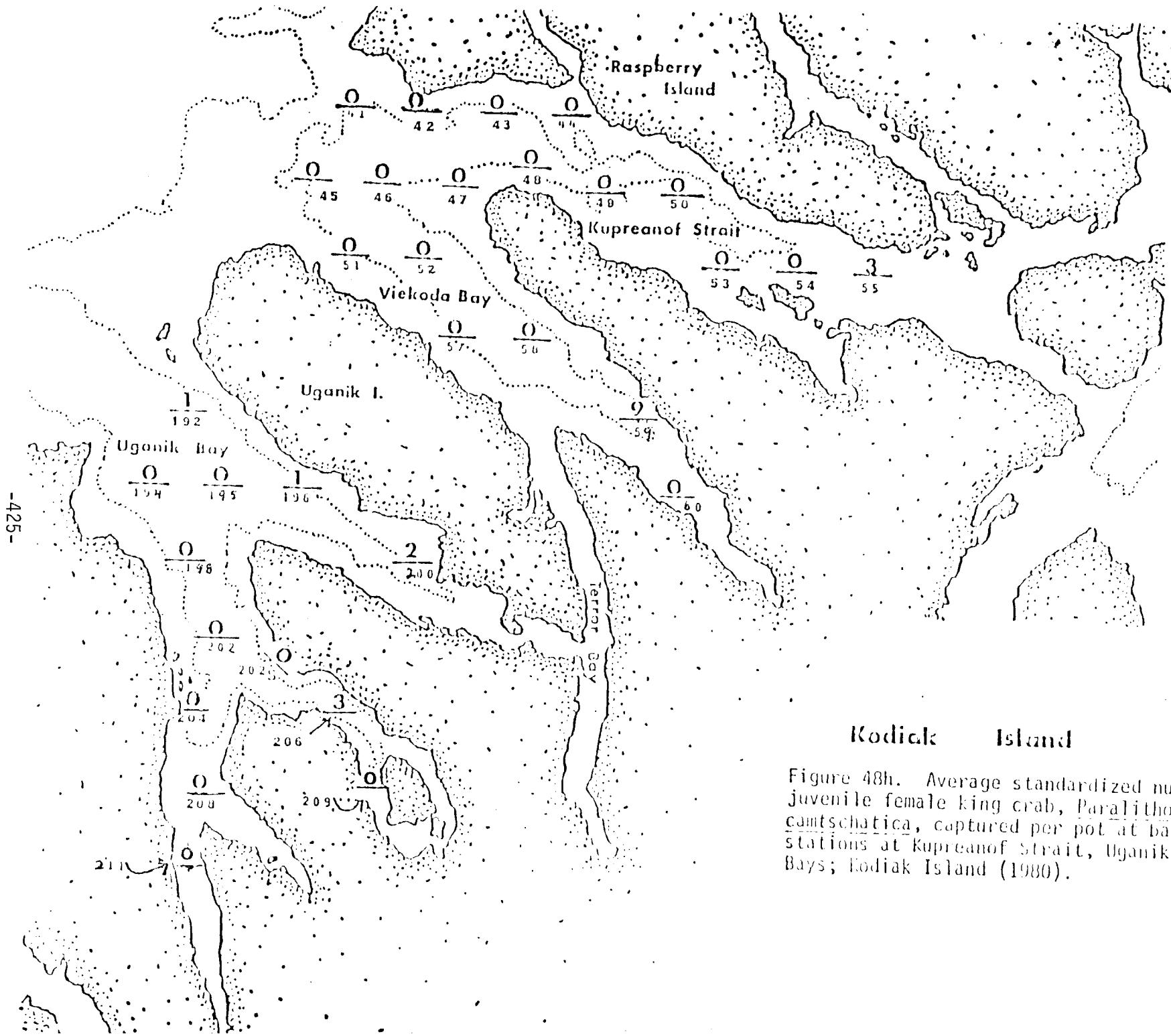
### Kodiak Island

Figure 48f. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bay; s Kodiak Island (1977).



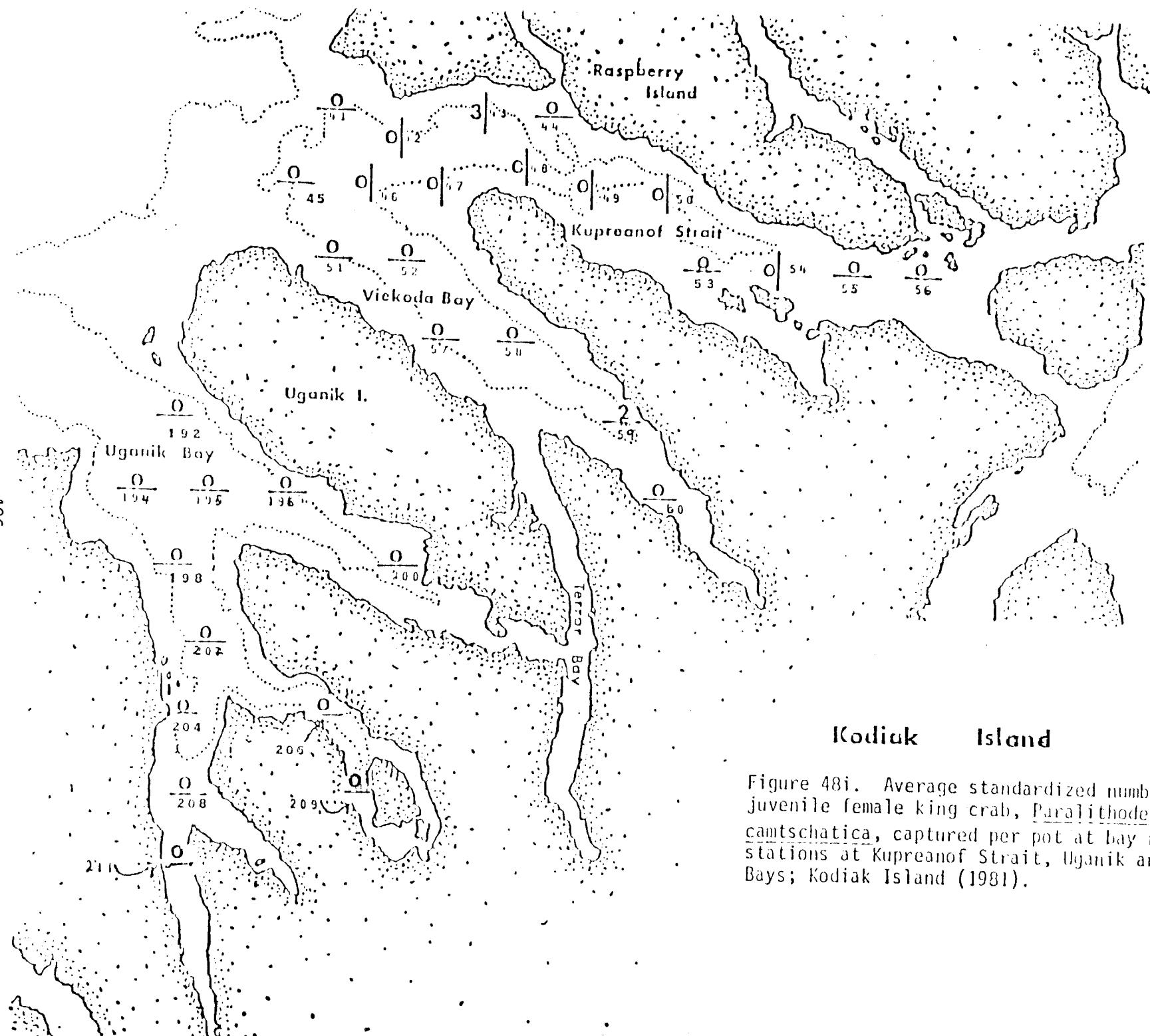
### Kodiak Island

Figure 48g. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kupreanof Strait, Uganiik and Viekoda Bays; Kodiak Island (1979).



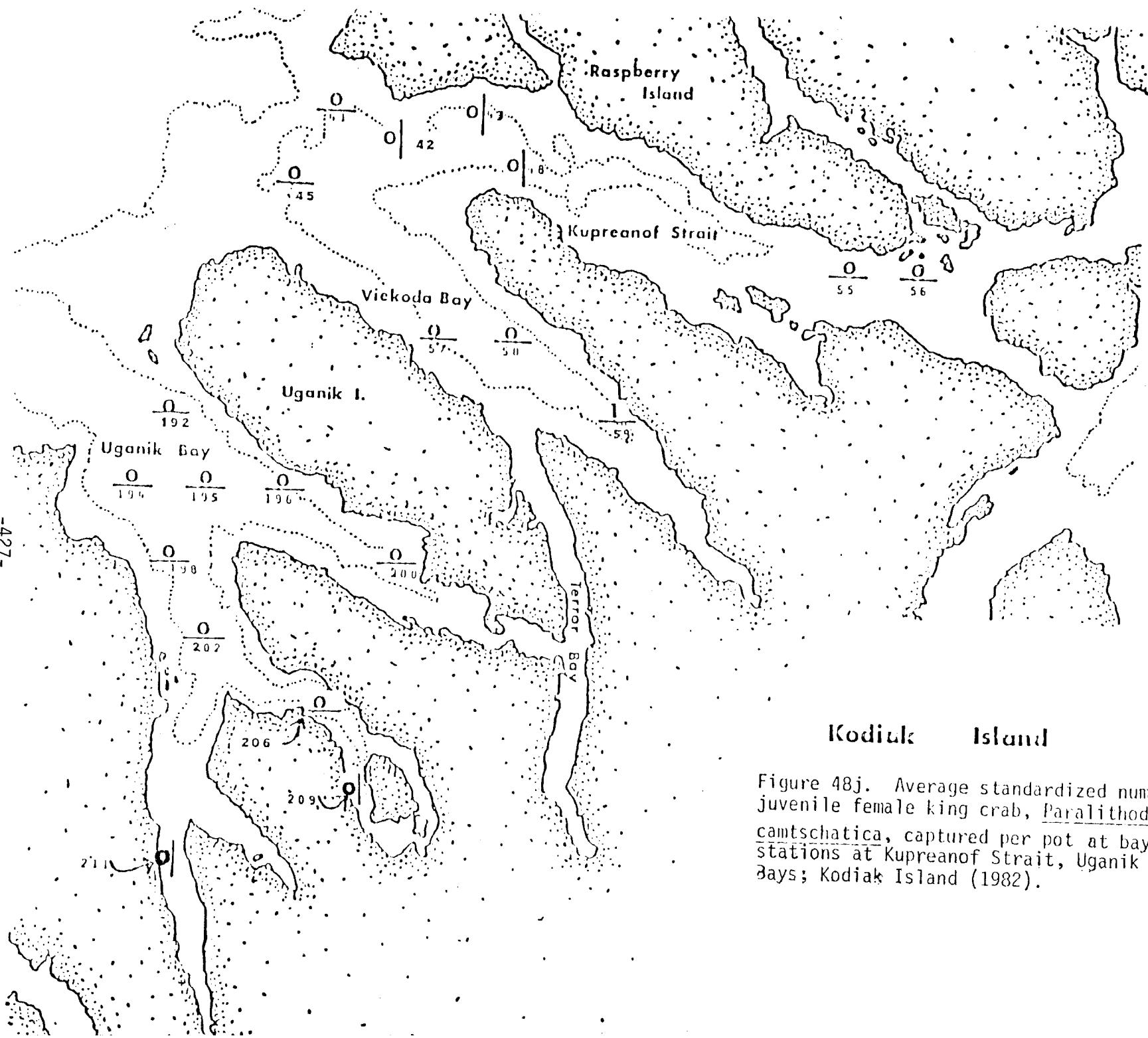
### Kodiak Island

Figure 48h. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1980).



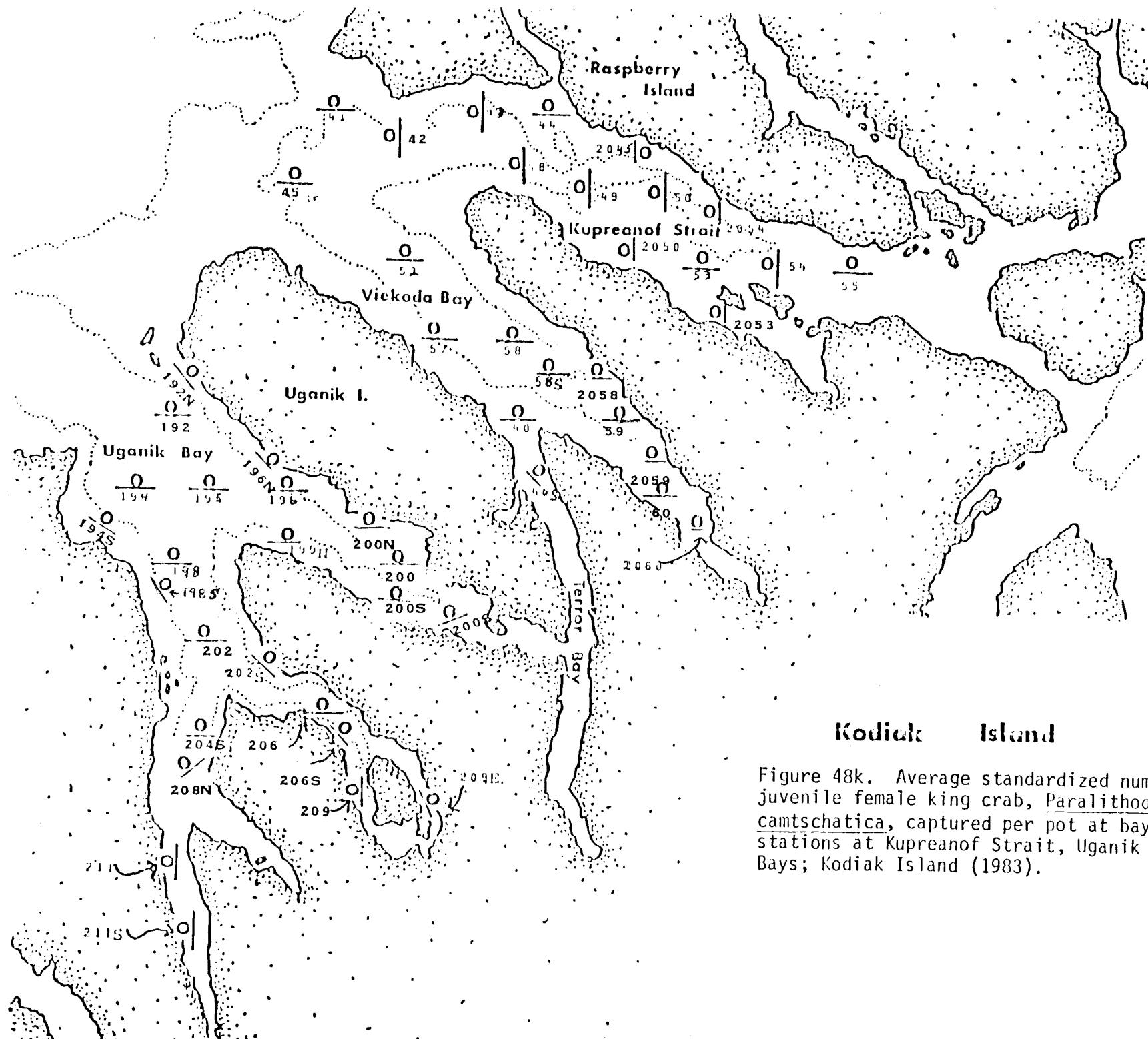
### Kodiak Island

Figure 48i. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1981).



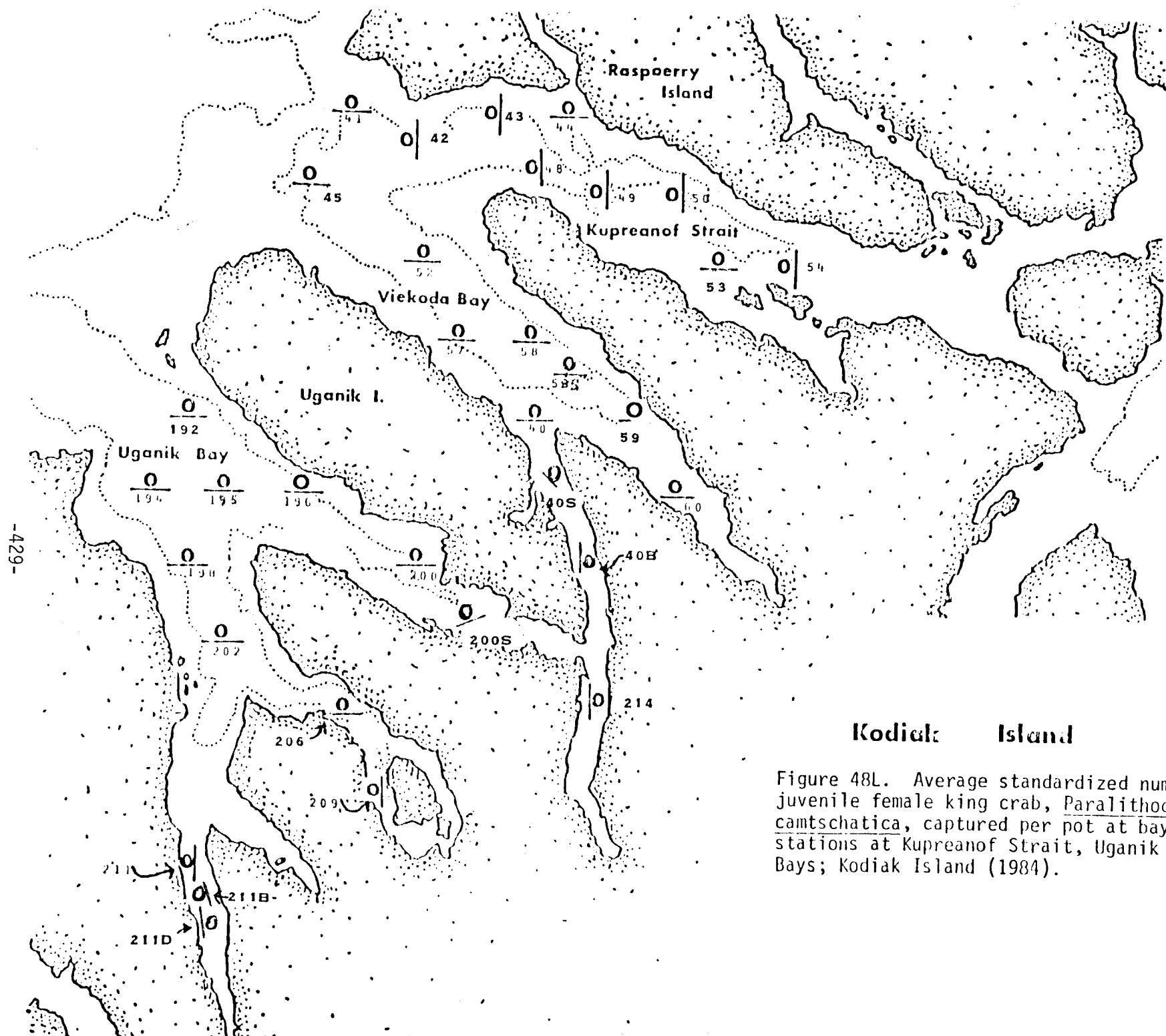
### Kodiak Island

Figure 48j. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1982).



### Kodiak Island

Figure 48k. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1983).



### Kodiak Island

Figure 48L. Average standardized number of juvenile female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1984).

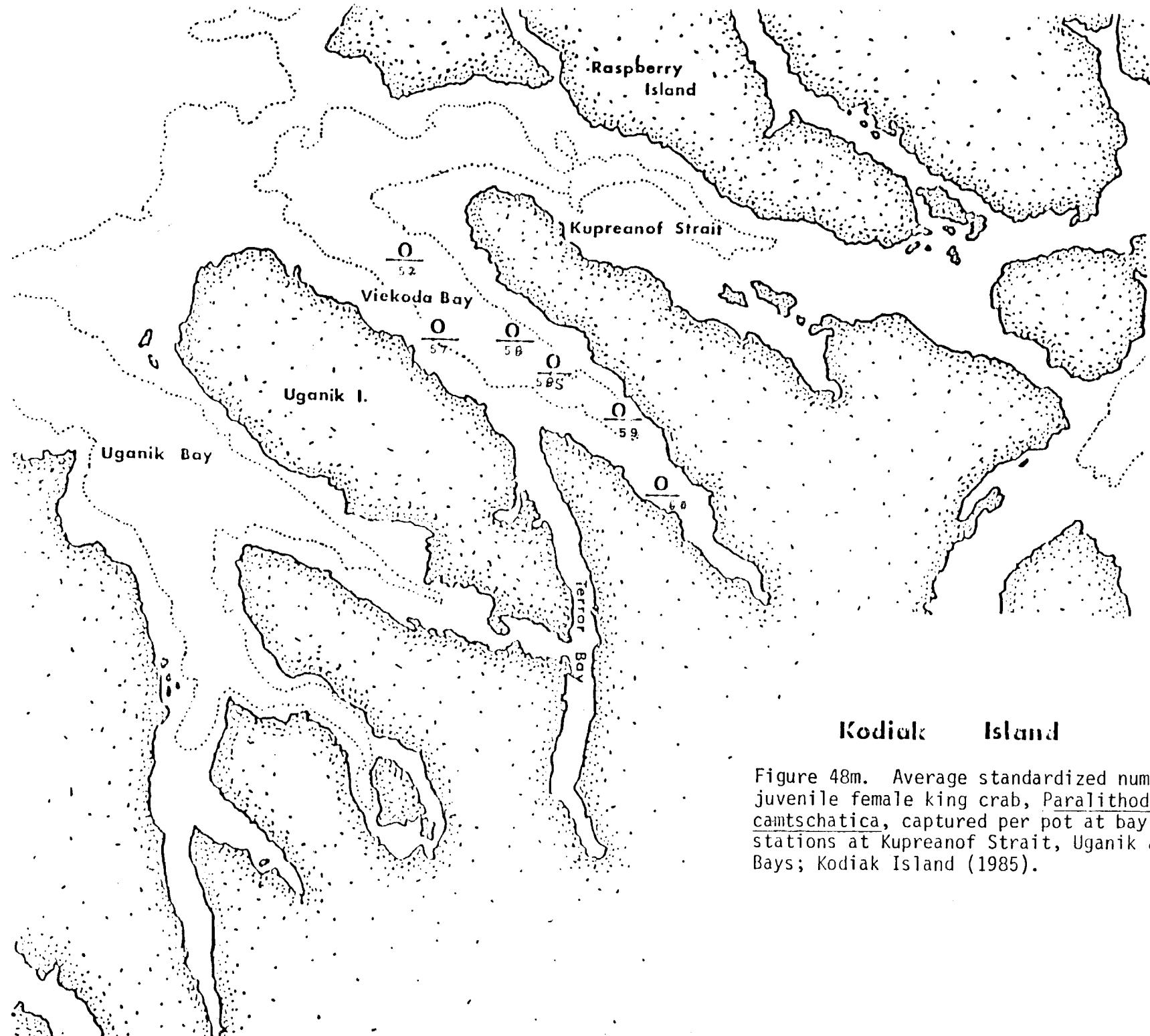


Figure 48m. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (1985).

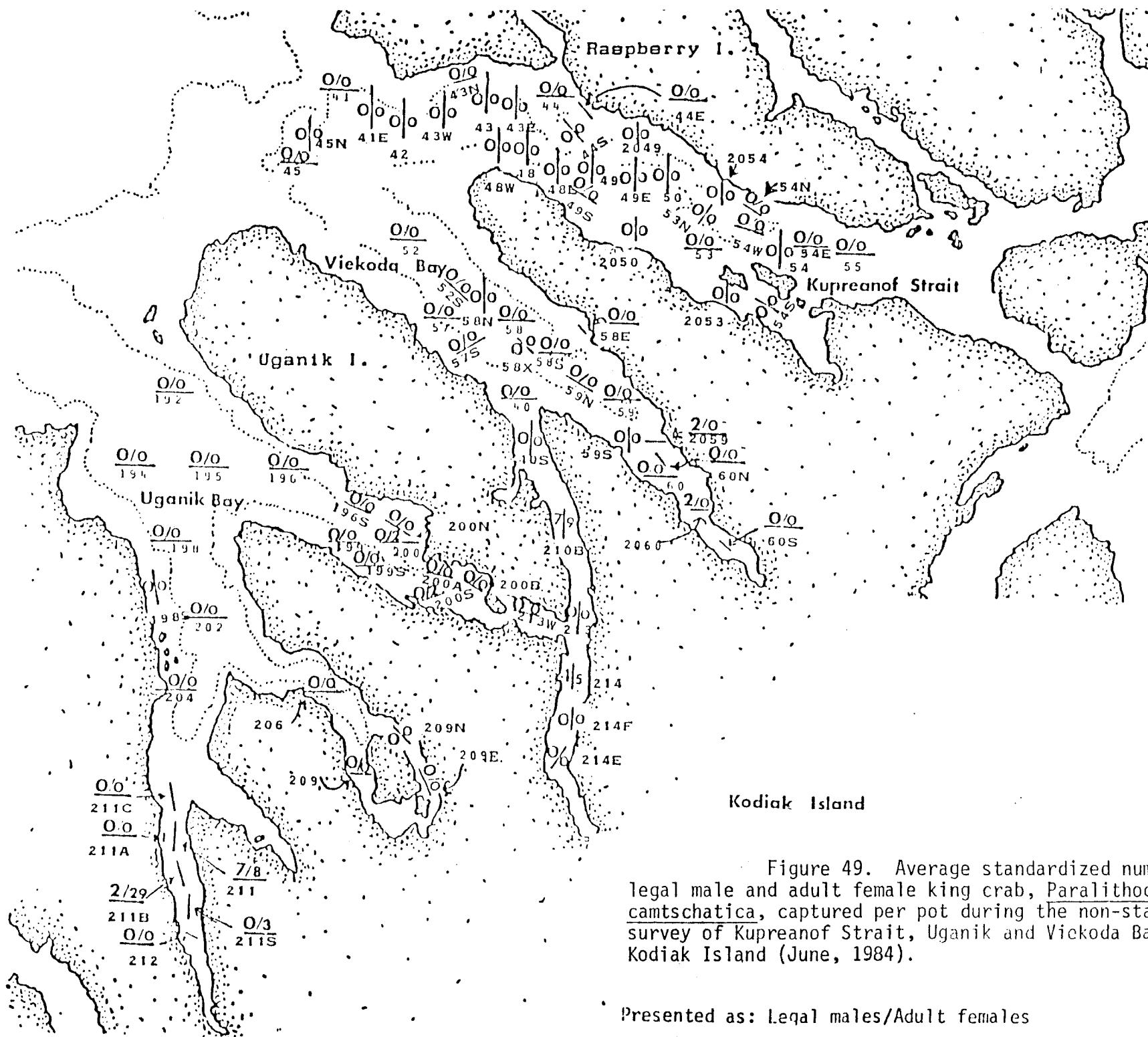


Figure 49. Average standardized number of legal male and adult female king crab, Paralithodes camtschatica, captured per pot during the non-standard survey of Kupreanof Strait, Uganik and Vickoda Bays; Kodiak Island (June, 1984).

Presented as: Legal males/Adult females

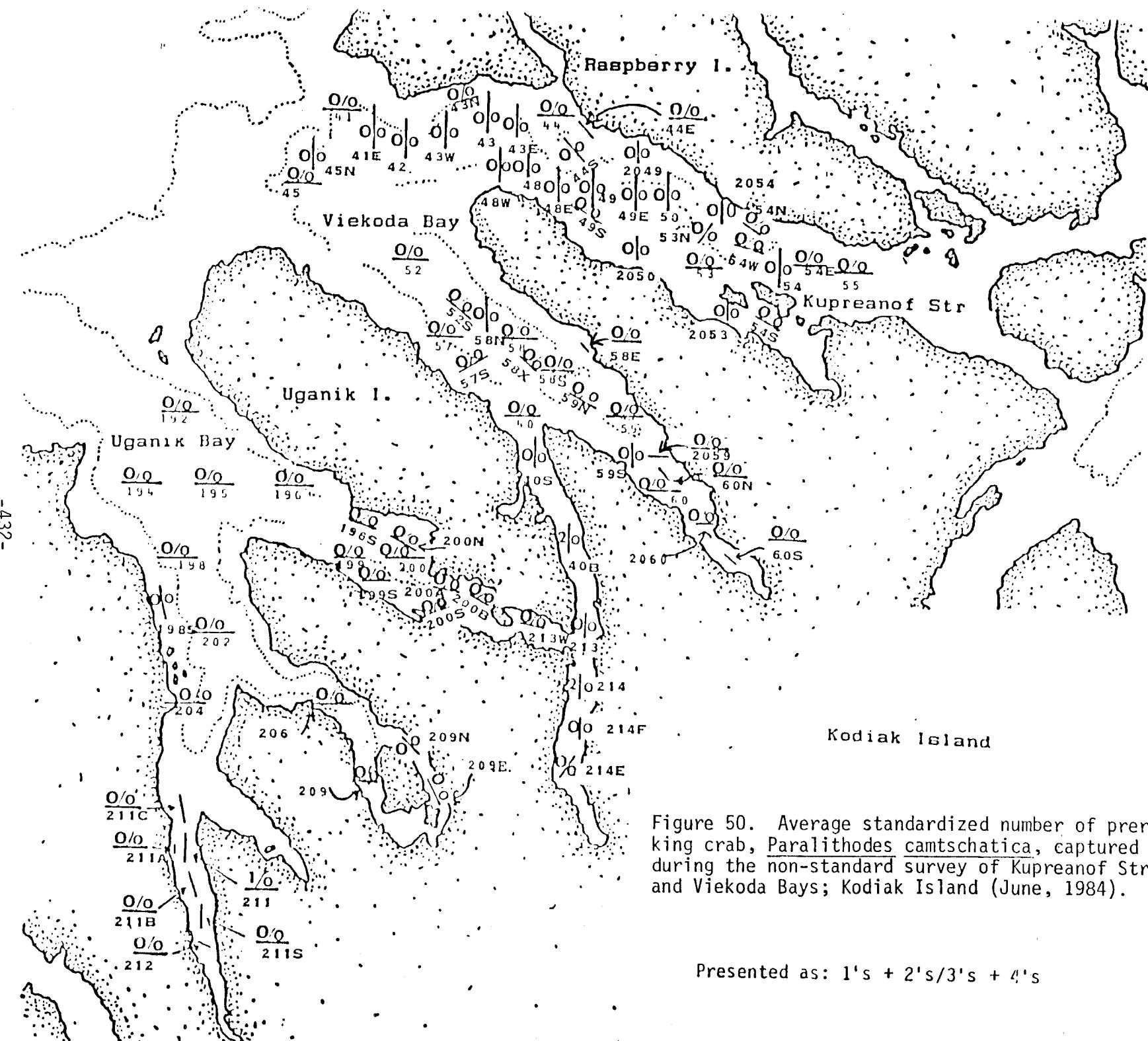


Figure 50. Average standardized number of prerecruit male king crab, *Paralithodes camtschatica*, captured per pot during the non-standard survey of Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (June, 1984).

Presented as: 1's + 2's/3's + 4's

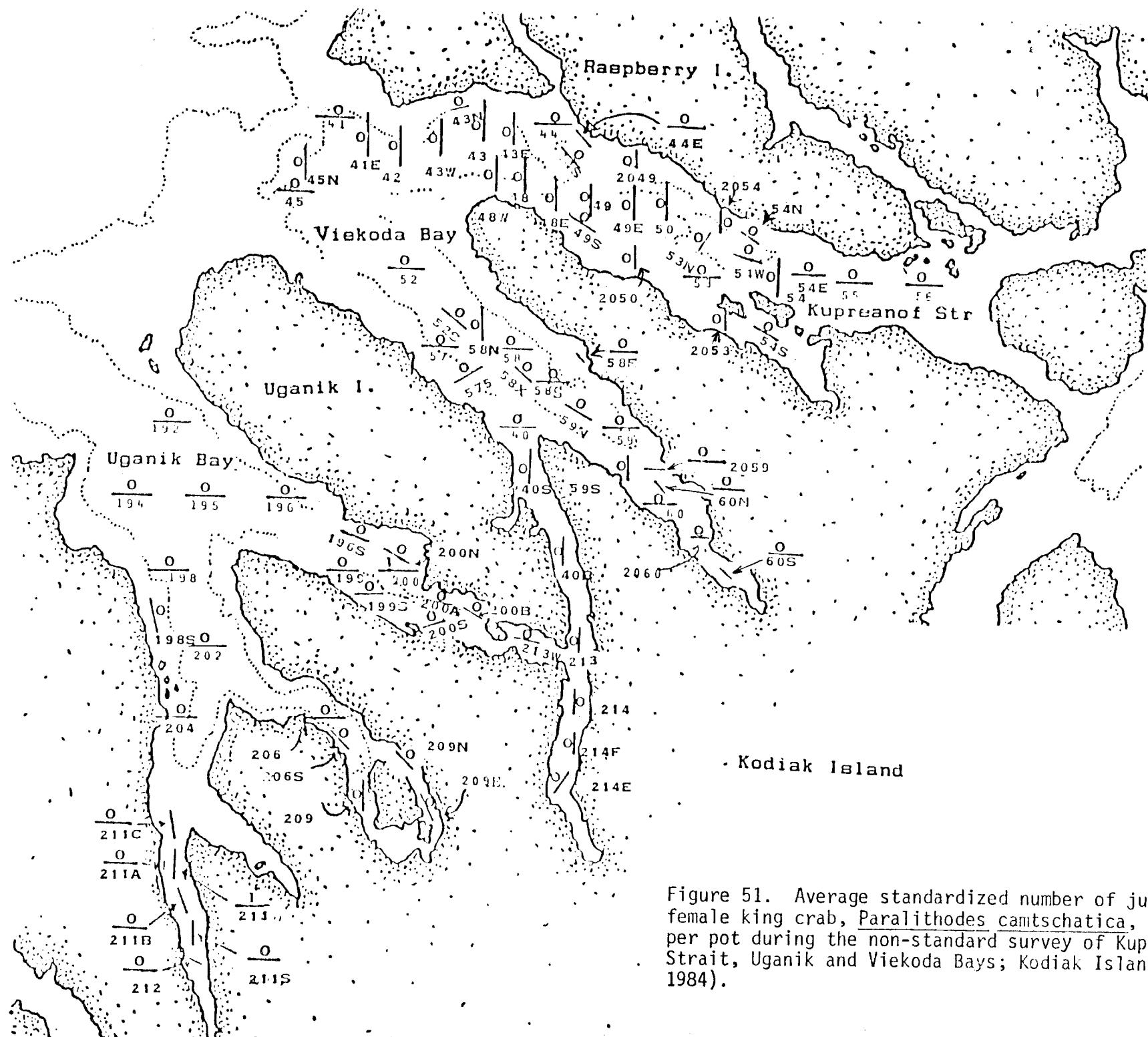


Figure 51. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot during the non-standard survey of Kupreanof Strait, Uganik and Viekoda Bays; Kodiak Island (June, 1984).

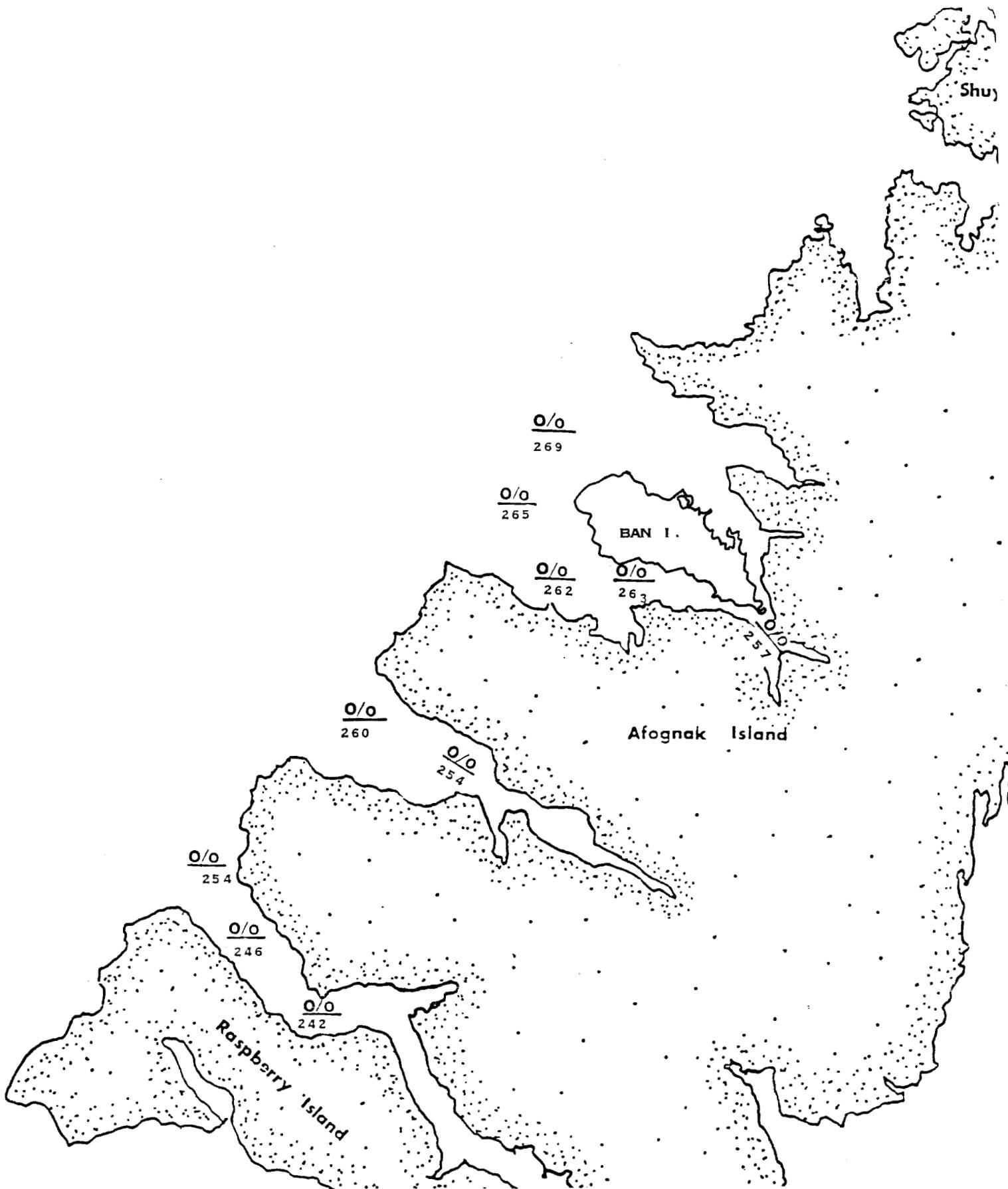


Figure 52. Average standardized number of legal male and adult female king crab, *Paralithodes camtschatica*, captured per pot at bay research stations at the West Side of Afognak Island (1979).

Presented as: Legal males/Adult females

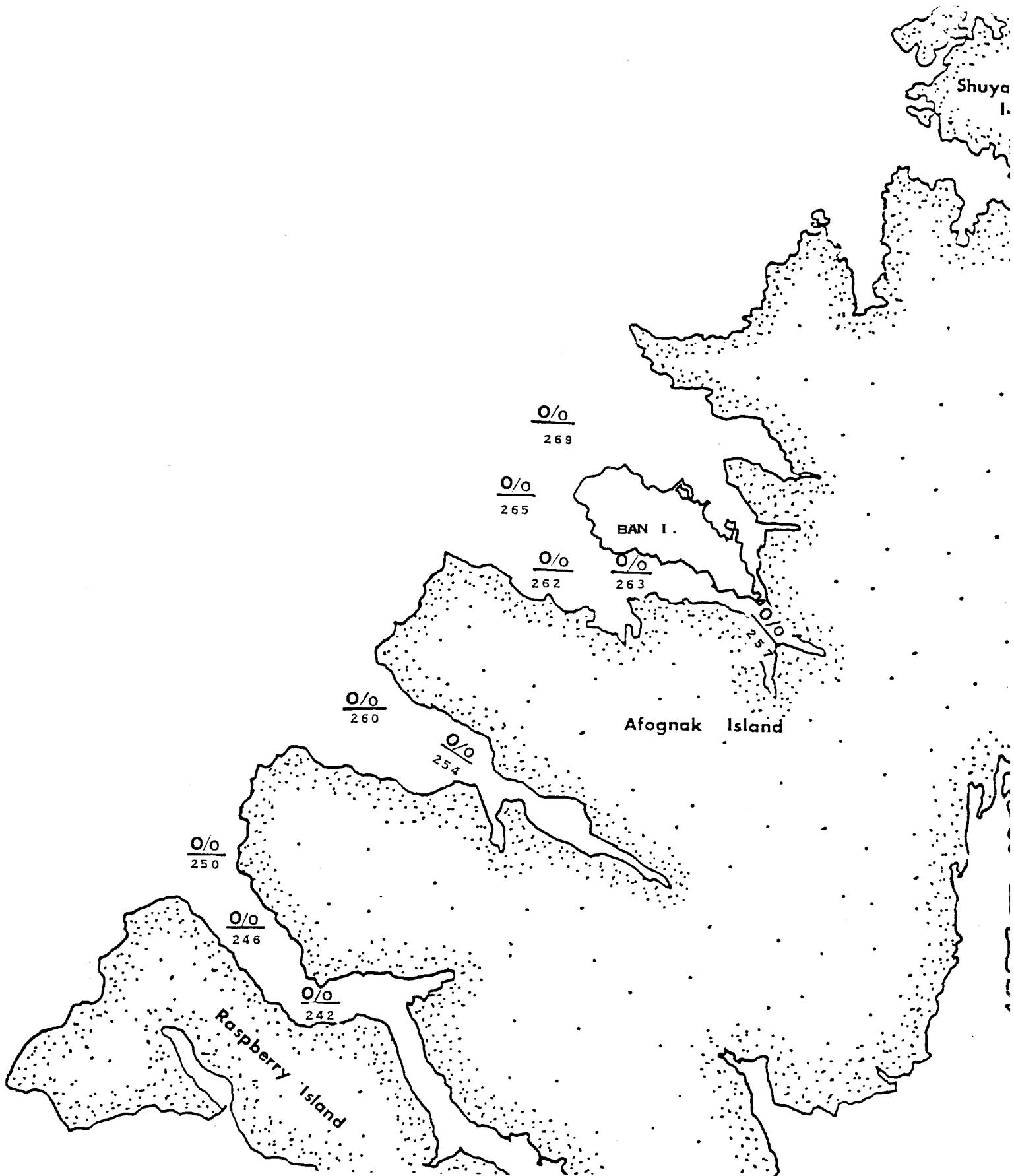


Figure 53. Average standardized number of prerecruit male king crab, Paralithodes camtschatica, captured per pot at bay research stations at the West Side of Afognak Island (1979).

Presented as: 1's + 2's/3's + 4's

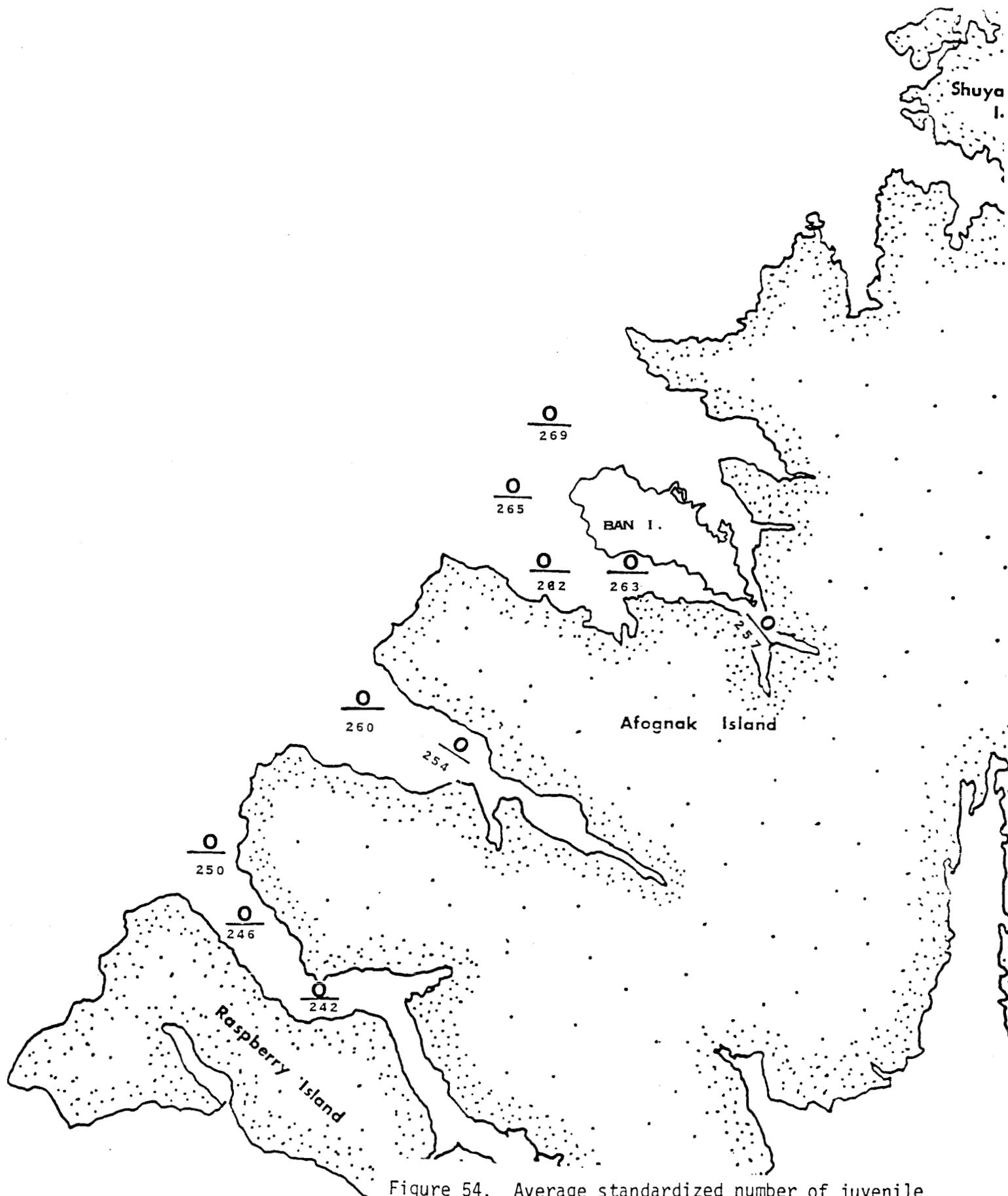


Figure 54. Average standardized number of juvenile female king crab, Paralithodes camtschatica, captured per pot at bay research stations at the West Side of Afognak Island (1979).

## APPENDIX A

Appendix A. Kodiak pot survey station conversion: 1972, 1973 and 1974 to 1985 numbers.

1972	to	1985	1972	1985	1972	1985
209		328	210	338	212	364
213		365	216	430	217	431
201		446	202	452	203	465
204		470	338	464W	339	445S
335		514	336	509	337	497
205		501	207	518	208	523
220		537	221	541	222	546
223		550	224	594	225	599
226		603	268	581	267	580
245		684	252	593	253	598
254		602	247	588	248	596N
249		585	250	601	251	610
266		592	233	611	234	617
235		625	236	626	237	638
238		645	227	600	229	606
230		623	231	624	232	631
255		637	256	643	257	656
259		662	261	664	262	668
263		698	246	690	295	686
296		692	297	695	292	666
334		673	333	667	240	622
241		655	242	661	306	726
307		721	308	717	309	707
294		740	330	747	331	742
304		759	305	756	300	829
301		810	302	800	303	791
310		867	313	846	288	758
289		754	332	794	284	849
285		840	286	832	287	822
277		856	278	848	298	879
299		873	279	847	280	830
281		811	282	775	283	765
650		83S	700	84S	750	87E
800		91N	850	91S	900	98N
925		90S	950	87S	500	
550		75N	600	75E		6974E

-continued-

Appendix A. Kodiak pot survey station conversion, 1973, 1974 and 1975  
numbers to 1985 numbers (continued).

1973-5	to	1985	1973-5	to	1985	1973-5	to	1985
318		453	321		470	322		497
323		501	324		513	325		518
326		523	327		529	328		446
330		452	361		379	362		372
363		380	364		408	365		401
366		416	367		431	368		430
369		438	370		469	371		486
372		536	373		537	374		541
376		415	378		476	379		386
380		394	381		395	382		400
383		424	386		364	387		371
390		463E	408		387	488		487
489		492	490		498	492		348
493		356	494		349	495		350
496		365	497		358	498		417
499		425	500		426	501		434
502		441	503		442	504		449
592		582	593		588	594		596N
595		585	598		590	599		594
600		599	601		603	602		601N
603		600	604		606	605		624
606		623	607		631	608		583
609		587	610		591	614		579
615		581	616		580	617		586
618		593	619		598	620		602
621		608	622		596	623		592
624		601	625		610	626		597
627		607	628		589	636		611
637		618	638		617	640		625
641		633	642		632	643		639
644		638	645		645	646		616
647		622	648		630	649		642
650		649	651		667	654		666
655		673	656		679	657		686
658		692	659		695	660		700
661		636	662		654	663		661
664		660	671		637	672		644
673		643	674		651	675		650
676		656	677		655	678		662
680		680	681		687	682		696
683		698	684		652	685		657
687		668	735		874	736		869
737		868	738		863	739		855
740		856	741		848	742		849
743		840	744		841	745		832
746		822	747		823	748		862
749		831	775		839	776		830
777		820	778		810	779		811
780		783	781		775	782		765

-continued-

Appendix A. Kodiak pot survey station conversions: 1972, 1973 and 1974 to 1985 numbers (continued).

1973-5	1985	1973-5	1985	1973-5	1985
783	812	784	802	788	760
789	757	790	752	791	743
792	739	793	740	794	733
795	847	796	821	797	801
798	792	799	784	804	753
805	748	806	737	807	747
820	879	821	873	822	861
823	854	824	838	825	829
826	819	827	800	828	791
829	774	830	764	831	756
832	742	833	736	31	85S
32	97E				

## APPENDIX B

## Appendix B 1.

Appendix B2.

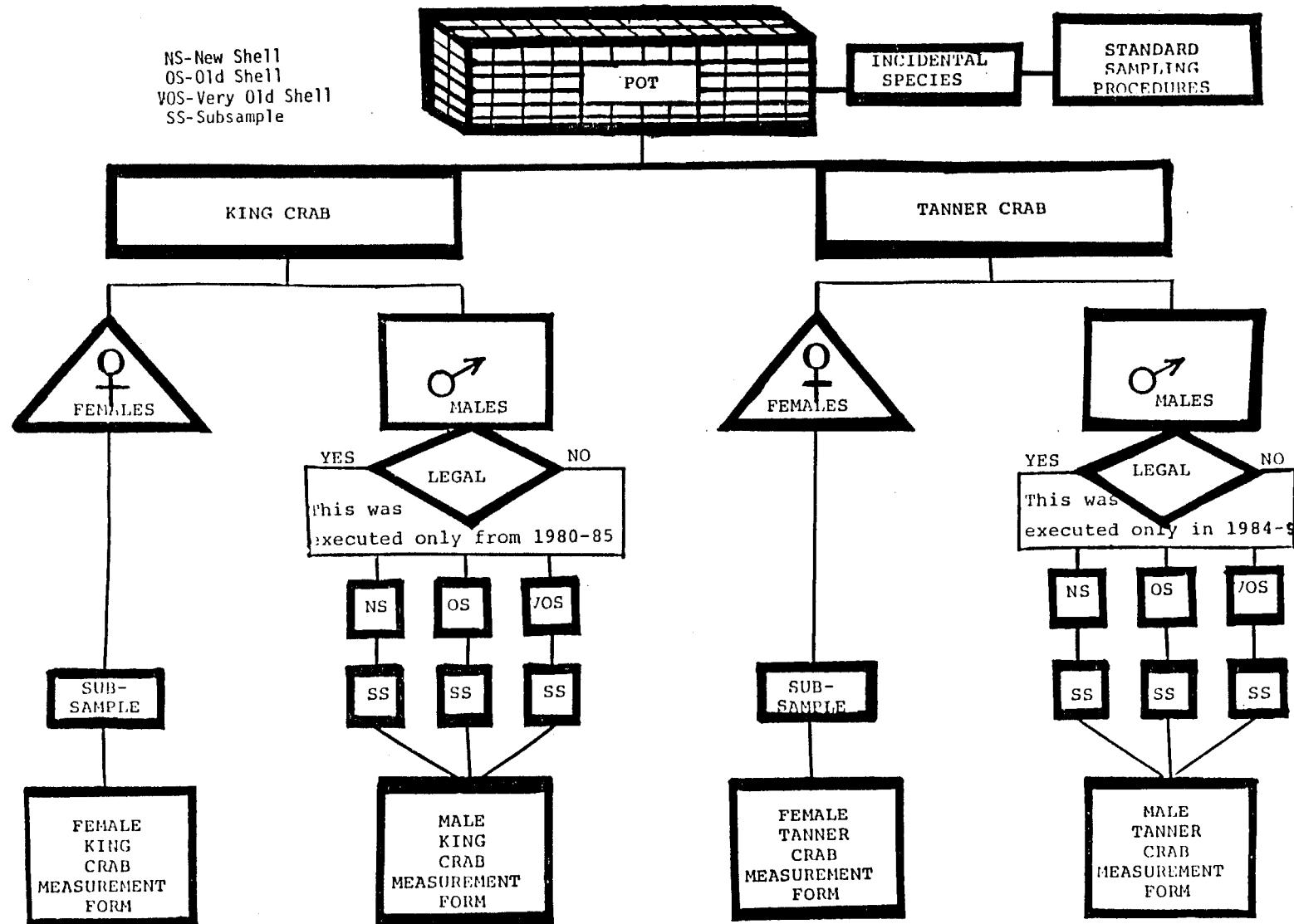
PILOT HOUSE "SKIPPERS" FORM (Ocean)																
YEAR	CONDITIONS DURING SOAK								Vessel Recorder							
	WIND		SEAS	TIDAL DIFFERENCE	PRESSURE		RAIN-FOG SUN	STATISTICAL AREA	SUB AREA	BAY DISTRICT	LORAN SYSTEM					
	Vel.	Dir.	(ft)					64	66	68	85					
STATION or STRING #	SET GEAR			POT # (bouy)	DEPTH (fathoms)	POT ORDER	LIFT GEAR			Loran Position of End Pots In Each String						
	Month	Day	Time				Month	Day	Time	West End	73	75	77	81		
	14	16		22	22	1	36	36	42	EAST END	78	79	80	82		
						2										
						3										
						4										
						5										
						6										
						7										
						8										
						9										
						10										
						11										
						12										
						13										
												Setting	Record From	POT ORDER (1-13)		
												West to East	- Top to Bottom	N	13	
												North to South	- Top to Bottom	1	13	13E
												East to West	- Bottom to Top	13	13	S

## APPENDIX C

Appendix C. Tag release form

	FILE NUMBER	TAG NUMBER	SUB AREA	DEPTH	LENGTH	AGE SINCE ECOSYSIS	LDG INJURY			Carapace	Pot No.			
	13	9	15	18	21	23	24	25	26	27	28	29	30	31
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
	13	9	15	18	21	23	24	25	26	27	28	29	30	31

## APPENDIX D



Appendix D. Sampling format used on red king crab, Paralithodes camtschatica, research surveys 1971-1985.

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